**NOT FOR DISTRIBUTION IN OR INTO THE UNITED STATES**

# PT CHANDRA ASRI PETROCHEMICAL TBK

## BUSINESS, FINANCIAL AND INDUSTRY UPDATE

## OVERVIEW

### Financial Results for First Quarter of Fiscal Year 2017

In May 2017, PT Chandra Asri Petrochemical Tbk (the "**Company**") released its first quarter financial results for the three months ended 31 March 2017.

The Company reported net revenues of US$632.7 million in the three months ended 31 March 2017, a 76.6% increase from the corresponding period in the prior year, and gross profit for the three months ended 31 March 2017 of US$176.3 million, a 184.8% increase from the corresponding period in the prior year. See "*Financial Update*" below for further information and discussion on the Company's financial results for the three months ended 31 March 2017.

### Rights Issue

On 24 May 2017, the Company filed a registration statement with the Indonesian Financial Services Authority (*Otoritas Jasa Keuangan* or "**OJK**"), in connection with a potential rights issue ("**Rights Issue**"). The Company is conducting the Rights Issue to fulfill the listing requirement whereby the total shares owned by non-controlling and non-principal shareholders are not less than 50,000,000 shares and are not less than 7.5% of paid- up capital based on the provision in V.1 of the Indonesia Stock Exchange ("**IDX**") Rule No. 1-A Concerning Listing of Shares and non-Share Equity Securities Issued by Listed Companies.

Pursuant to the Rights Issue, the Company will issue rights (the "**Rights**") on a *pro rata* basis to eligible holders of its ordinary shares of par value Rp1,000 per share (the "**Shares**"). Each holder of the Company's shares as recorded in the Company's shareholders register eight business days after the date of the effective statement of the Company's registration statement (the "**Record Date**") will be credited with Rights at a ratio of 4 Rights for every 47 existing Shares held on such date. Each Right would entitle the holder thereof to subscribe for one newly issued Share at an exercise price, which the Company expects to be between Rp18,000 per Share to Rp22,000 per Share. Assuming all of the Rights are exercised, we will have an aggregate of 279,741,494 newly issued Rights Shares ("**New Shares**").

The Company's shareholding structure and composition as of 31 May 2017 was as follows:

| | Nominal Value Rp1,000 per Share | | |
|---|---|---|---|
| | Number of Shares | Total Nominal Value (Rp) | % of Total Nominal Value (%) |
| **Authorised Capital** | 12,264,785,664 | 12,264,785,664,000 | |
| **Paid-up Capital** | | | |
| Barito Pacific | 1,480,383,520 | 1,480,383,520,000 | 45.04 |
| SCG Chemicals | 1,004,825,959 | 1,004,825,959,000 | 30.57 |
| Prajogo Pangestu | 503,399,869 | 503,399,869,000 | 15.32 |
| Marigold | 169,362,186 | 169,362,186,000 | 5.15 |
| Public (each with an ownership of less than 5%) | 128,991,024 | 128,991,024,000 | 3.92 |
| **Total paid-in capital** | **3,286,962,558** | **3,286,962,558,000** | **100.0** |
| Shares in portfolio | **8,977,823,106** | **8,977,823,106,000** | |

Based on the contemplated size of the Rights Issue, existing shareholders who do not exercise their right to subscribe to the New Shares would be subject to a dilution of their existing Shares by up to 5.5%.

The proposed Rights Issue is being conducted pursuant to the prevailing Indonesian capital markets laws and regulations, which generally require that an Indonesian company proposing to increase its issued and paid-up capital by the issue of new shares must first offer its existing shareholders the pre-emptive right to subscribe for such new shares in proportion to their shareholdings in that company.

## FINANCIAL UPDATE

### Key Factors Affecting Results of Operations and Financial Condition

Set forth below are a number of factors that have had important effects on the Company's results of operations and that the Company expects to continue to impact its financial performance in the future.

***Supply and demand dynamics***

Our net sales, profit margins and operating performance are sensitive to supply and demand dynamics in both the domestic and international petrochemical markets. Demand for our products is generally linked to the level of economic activity or GDP growth. Supply is affected by production capacity available in the market. As demand for petrochemical products approaches available supply, industry capacity utilisation rates rise, and prices and margins typically increase. Historically, this relationship has been highly cyclical due to fluctuations in supply resulting from the timing of new investments in capacity and general economic conditions affecting the relative strength or weakness of demand. Generally, capacity is more likely to be added in periods when prevailing or expected future demand is strong and margins are, or are expected to be, high. Investments in new capacity can result, and in the past frequently have resulted, in overcapacity, which typically leads to a decrease in industry capacity utilisation rates and a reduction of margins. In response, petrochemical producers typically reduce capacity or limit further capacity additions, eventually causing the market to be relatively undersupplied and leading to a rise in industry capacity utilisation and margin expansion. Although we are the sole domestic producer of some of our products and we believe we have significant advantages over both our domestic and international competitors, the petrochemical industry has historically been characterised by periods of tight supply, leading to high utilisation rates and margins, followed by periods of oversupply primarily resulting from significant capacity additions, leading to reduced utilisation rates and margins. Oversupply results in reduction of the price of our products, which leads to a reduction in our profit margins, whereas during periods of tight supply, we benefit from the increase in product prices which lead to enhanced profit margins. Our historical results reflect these supply and demand dynamics and the volatile nature of the petrochemical industry.

Prices of our products are set by regional benchmark prices. Historically, we have been able to price some of our products at a premium to benchmark prices, mainly as a result of (i) our close proximity to customers, which results in shorter lead-time delivery, (ii) our ability to deliver our products regularly and in smaller quantities, and thus assisting our customers with their working capital efficiencies, as compared to imported products, which typically requires longer delivery time and bulk volume delivery, (iii) the security of product supply compared to imported products and (iv) the technical assistance that we provide. Since 2014, we experienced a decrease in the average sales price per tonne of our products. During the years ended 31 December 2014, 2015 and 2016, the average sales prices of olefins were US$1,148.2/MT, US$774.6/MT and US$758.6/MT, respectively. During the years ended 31 December 2014, 2015 and 2016, the average sales prices per tonne of polyolefins were US$1,659.6/MT, US$1,285.4/MT and US$1,191.1/MT, respectively. During the years ended 31 December 2014, 2015 and 2016, the average sales prices per tonne of styrene monomer and by-products were US$1,598.5/MT, US$1,088.5/MT and US$1,023.7/MT, respectively. During the years ended 31 December 2014, 2015 and 2016, the average sales prices per tonne of butadiene were US$1,176.9/MT, US$741.9/MT and US$689.9/MT, respectively.

***Cost of feedstock***

We use naphtha as our primary feedstock to produce our products and, accordingly, the cost of naphtha, all of which is purchased from independent third parties, represents by far the largest portion of our cost of goods sold. During the three months period ended 31 March 2017, the cost of naphtha accounted for approximately 64.7% of our cost of revenues. During the years ended 31 December 2014, 2015 and 2016, the cost of naphtha accounted for approximately 62.9%, 45.9% and 61.3% of our cost of revenues, respectively.

The price of naphtha generally follows the price trend of crude oil, and varies with the market conditions for crude oil, which in recent times have been highly volatile. Naphtha price movements have not always been of the same magnitude or direction as changes in the prices we historically received for our products. Accordingly, increases or decreases in naphtha prices may have a material effect on our margins. During 2014, 2015 and 2016, approximately 69.7%, 69.6% and 76.1% of our naphtha was supplied pursuant to one-year contracts at a formula price, respectively. During 2016, the average cost per tonne of naphtha which is linked to the price of Brent crude oil, decreased by 25.7% to US$400/MT from US$455/MT in 2015. Similarly, the average cost per

tonne of benzene, which is the primary raw material for styrene monomer, decreased by 14.8% from 2014 to 2016, from US$614/MT compared to US$721/MT in 2015. During 2015 and 2016, approximately 69.6% and 76.1% of our naphtha was supplied pursuant to one-year contracts at a benchmark price, respectively.

The prices of naphtha also tend to be correlated with the crude oil prices. The industry has seen the price of naphtha decrease since 2014, which tracked the rapid decline in the crude oil prices; in particular, starting from the fourth quarter of 2014 until the end of the first quarter of 2016, the price of Brent crude oil declined by nearly 50 per cent. Meanwhile, the prices for our products have also decreased, although at a slower rate than the decrease in the price of naphtha. As a result, our operating margins have increased during the periods. On the contrary, the oil price recovered in the first half of 2017, which led naphtha price to increase, pressuring our operating margins. The average price per tonne of naphtha decreased from US$860/MT in 2014 to US$455/MT in 2015 and US$400/MT in 2016. Our gross product margins for olefins during the years ended 31 December 2014, 2015 and 2016 were 2.0%, (0.9)% and 27.5%, respectively. Our gross product margins for polyolefins during the years ended 31 December 2014, 2015 and 2016 were 7.0%, 15.8% and 32.0%, respectively. Our gross product margins for styrene monomer during the years ended 31 December 2014, 2015 and 2016 were 1.7%, 5.0% and 8.0%, respectively. Our gross product margins for butadiene during the years ended 31 December 2014, 2015 and 2016 were 2.8%, (5.1)% and 11.1%, respectively.

We use propylene as our feedstock to produce polypropylene. We generally use all of our propylene production as feedstock for our own production of polypropylene. However, our propylene production is not sufficient for all of our polypropylene production and we typically import propylene to use as feedstock. During the years ended 31 December 2014, 2015, 2016 and the three months ended 31 March 2017, we produced 296 KT, 182 KT, 416 KT and 114 KT, respectively, of propylene and purchased 220 KT, 315 KT, 176 KT and 18 KT of propylene, respectively. During the years ended 31 December 2014, 2015 and 2016, the cost of propylene accounted for approximately 13.2%, 26.1% and 8.7% of our cost of goods sold, respectively. The price of propylene is generally determined by supply and demand for propylene in the market. Propylene price movements have not always been of the same magnitude or direction as changes in the prices we received for our products. Accordingly, increases or decreases in propylene prices have had a material effect on our margins.

As a result, increases in feedstock prices may have a material adverse effect on our margins and cash flows, to the extent that such increases are not passed through to the selling prices of our products. Significant volatility in feedstock costs may also put pressure on our margins, since sales price increases for our products may lag behind feedstock price increases. There can be no assurance that increases in feedstock prices will not adversely affect our business or results of operations in the future.

***Economic conditions***

Global and domestic macroeconomic conditions have historically had a significant impact on our operations and will continue to impact our operations. For example, the European debt crisis and China's economic slowdown in 2012 as well as high naphtha prices which resulted from the high oil prices triggered by heightened tensions in the Middle East stalled the growth of the petrochemical industry we operate in and have therefore resulted in significant decline in our profit margins and profitability in 2012. Moreover, in the second half of 2014, declining commodity prices, including the price of oil, led to a significant drop in the price of naphtha, which closely tracks oil prices, from which our operations benefited due to reduced feedstock cost. The global financial crisis, which commenced during the second half of 2008, had a negative effect on Indonesia and has negatively impacted our results of operations. According to the IMF, the global downturn adversely affected the economic performance of Indonesia, slowing real GDP growth rate to 5.6%, 5.0%, 4.8% in 2013, 2014 and 2015 respectively, before strengthening to 4.9% in 2016.

***Maintenance programs (TAM, SDM) and unplanned outages***

Our results of operations are materially influenced by the degree to which we utilise our assets in order to achieve maximum production volumes. We seek to operate our facilities at full capacity to maintain positive margins and cash flows, allowing us to withstand industry downturns more readily than other producers who have higher production costs. We aim to achieve growth in production volume by improving utilisation rates within the defined availability of an asset and improving availability of an asset by minimising planned and unplanned facility downtime. Scheduled maintenance programs such as TAM and SDM, as well as unplanned shutdowns of our plants, may affect our utilisation rate, which results in fluctuation in our total production. In 2014, 2015 and 2016, our aggregate production was 2,340 KT, 1,698 KT and 2,796 KT respectively.

We are required to conduct TAM, which includes certification of safety valves, major repair and maintenance, major scheduled renewals and replacements with respect to our plants, to maximise operating level through plant modernisation. During the TAM, we shut our respective facilities for between 35 up to 45 days, depending on the product, which results in a decline in our production of products during such period.

| | 2014 | | | | 2015 | | | | 2016 | | | | 2017 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Naphtha** | **1Q** | **2Q** | **3Q** | **4Q** | **1Q** | **2Q** | **3Q** | **4Q** | **1Q** | **2Q** | **3Q** | **4Q** | **1Q** |
| Capacity utilisation rate | 96.9% | 98.2% | 97.3% | 81.7% | 73.8% | 66.3% | 76.0% | 10.5% | 64.7% | 92.2% | 98.8% | 103.1% | 99.7% |
| Nameplate capacity (KT/A) | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 860 | 860 | 860 | 860 | 860 |

We are scheduled to conduct TAM every five years at our naphtha cracker plant, which typically lasts for 45 days. In September to December 2015, we conducted a scheduled TAM and expansion tie-in works, which resulted in the shutdown of our cracker facility for 85 days and limited our production capacity for 2015. The shutdown period was longer than the average as the TAM was conducted in conjunction with our cracker expansion project. After the TAM was complete, the nameplate capacity of our naphtha cracker increased to 860 KT/A. The capacity utilisation rate of our naphtha cracker during the year ended 31 December 2015 and the first quarter of 2016 was low at 56.5% and 64.7%, respectively, largely reflecting the impact of the naphtha cracker TAM and expansion tie-in works during 2015 and the ramp-up of our new capacity additions in the first quarter of 2016. The table below sets out the utilisation rates of our naphtha cracker during the periods indicated, which illustrates the effect of TAM on our production during the period.

We are scheduled to conduct the next TAM in 2020. After our recent review of our TAM procedures, we expect the TAM will result in a shutdown of our production plants for a maximum of approximately 45 days.

Our two styrene monomer plants each require a once every two year SDM for a period of 26 days to 30 days. In December 2016, we conducted a scheduled SDM, which resulted in the stoppage of our styrene monomer plants for 30 days. We conduct SDM for our butadiene plant at the same time as a TAM for our naphtha cracker plant, during which we shut down our production of butadiene for a period of up to 40 days.

Our operations are also subject to production and other factors beyond our control, which may subject us to unscheduled outages and shutdowns. In the past, we suffered from unplanned outages, including several unplanned shutdowns in 2015, due to us running several of our facilities for a longer time than usual to align them with the scheduled shutdown in relation to the scheduled TAM and expansion tie-in works for our cracker expansion project towards the end of 2015. The unplanned shutdowns, as well as the scheduled TAM and expansion tie-in works resulted in a decrease in the utilisation rate of our naphtha cracker from 93.5% in 2014 to 56.5% in 2015.

***Debottlenecking and expansion plans***

Our ability to increase our production and sales will depend on our ability to improve our capacity of assets through our debottlenecking and expansion plans. For example, our cracker expansion project, which we completed in December 2015, resulted in a 43% capacity increase for our products, namely ethylene (from 600 KT/A to 860 KT/A), propylene (from 320 KT/A to 470 KT/A), pygas (from 280 KT/A to 400 KT/A) and mixed $C_4$ (from 220 KT/A to 315 KT/A). We expect our debottlenecking and expansion plans to increase production capacity through the installation of new equipment and machinery in our existing production facilities.

We are currently undertaking a butadiene expansion project, a debottlenecking project for our polypropylene plant and a naphtha cracker furnace revamp. PT Synthetic Rubber Indonesia ("**SRI**"), our joint venture company between our wholly-owned subsidiary PT Styrindo Mono Indonesia ("**SMI**") and Michelin, commenced construction of a new synthetic rubber plant to produce synthetic butadiene rubber in Cilegon, Banten in November 2015. In addition, we have two projects in the pipeline, namely the construction of a new polyethylene plant and a new MTBE and Butene-1 plant. We expect that the development and completion of new plants will enable us to produce new additional and higher value-added downstream products.

***Tariffs***

Our results of operations have historically been affected in certain respects by tariffs imposed on imports of petrochemical products into Indonesia. Since 1 March 2017, the import of naphtha, ethylene, propylene, styrene monomer and butadiene is not subject to tariffs. The import of polyethylene and polypropylene is subject to a

tariff of 5% to 15% of the import price if imported from non-ASEAN countries and is not subject to tariff if imported from ASEAN countries.

***Environmental legislation***

Our results of operations are affected by environmental laws and regulations, including those relating to greenhouse gas emissions, and environmental risks and goals generally. We have invested, and will continue to invest, a significant amount of financial and technical resources in order to achieve and maintain compliance with environmental requirements. From time to time, we also incur remediation and decommissioning costs at our current and former production facilities, as well as at other locations. Environmental considerations can also impact the markets in which we operate, including its position with respect to its competitors.

***Seasonality***

We have historically experienced lower sales during festive seasons, particularly during Hari Raya in Indonesia during which only food and passengers are generally allowed to be transported on public roads. We have historically been unable to deliver products to our domestic customers for approximately 14 days during this festive period. While polyethylene and polypropylene operating rates are not necessarily reduced, inventory builds up for two weeks during this festive period. Approximately two weeks prior to this festive period, demand for our products builds up, while lower sales are experienced for approximately two weeks during the festive period. To the extent that the two weeks prior to the festive period and the two-week festive period do not fall within the same quarter, our results of operations will show the effects of seasonality.

**Description of Key Income Statement Line Items**

*Net revenue*. In 2014, 2015 and 2016, we derived our net revenue from (i) the sale of olefins (ethylene, propylene, pygas and mixed $C_4$), polyolefins (polyethylene and polypropylene), styrene monomer and its by-products and butadiene and its by-products and (ii) tanks and jetty rent. Our net revenue consisted of sales revenue net of VAT. We recognised domestic sales when the goods were delivered to customers. Export sales were generally made on an FOB basis and were recognised when the goods were dispatched, except for styrene monomer which was generally made on a CFR basis. In 2014, 2015 and 2016, our net revenue amounted to US$2,460.1 million, US$1,377.6 million and US$1,930.3 million, respectively.

The table below shows a breakdown of our net revenue according to each of our products and the average price of each of those products for the periods indicated.

| | For the year ended 31 December | | | | | | | | | For the three months ended 31 March | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2014 | | | 2015 | | | 2016 | | | 2016 | | | 2017 | | |
| | *(US$ millions)* | *Average sales price (US$)* | *Volume (KT)* | *(US$ millions)* | *Average sales price (US$)* | *Volume (KT)* | *(US$ millions)* | *Average sales price (US$)* | *Volume (KT)* | *(US$ millions)* | *Average sales price (US$)* | *Volume (KT)* | *(US$ millions)* | *Average sales price (US$)* | *Volume (KT)* |
| **Olefins** | | | | | | | | | | | | | | | |
| Ethylene | 261.4 | 1,375.8 | 190.0 | 84.9 | 1,030.3 | 82.4 | 375.2 | 985.3 | 380.8 | 47.0 | 925.2 | 50.8 | 132.2 | 1,056.6 | 125.1 |
| Propylene | 43.6 | 1,362.5 | 32.0 | 25.6 | 805.0 | 31.8 | 109.1 | 712.1 | 153.2 | 11.7 | 644.8 | 18.1 | 13.5 | 964.3 | 14.0 |
| Pygas | 193.9 | 979.3 | 198.0 | 60.6 | 567.9 | 106.7 | 106.4 | 451.8 | 235.5 | 22.0 | 415.4 | 53.0 | 44.8 | 640.4 | 70.0 |
| Mixed $C_4$ | 15.5 | 553.6 | 28.0 | — | — | — | 19.1 | 556.9 | 34.3 | 0.6 | 342.7 | 1.8 | 5.3 | 984.7 | 5.4 |
| **Polyolefins** | | | | | | | | | | | | | | | |
| Polyethylene | 516.1 | 1,643.3 | 314.0 | 308.2 | 1,357.7 | 227.0 | 387.1 | 1,225.8 | 315.8 | 81.5 | 1,199.7 | 67.9 | 94.6 | 1,228.4 | 77.0 |
| Polypropylene | 786.7 | 1,670.3 | 471.0 | 560.7 | 1,248.8 | 449.0 | 497.5 | 1,165.4 | 426.9 | 111.5 | 1,017.3 | 109.6 | 144.1 | 1,263.2 | 114.1 |
| **Styrene Monomer and By-products** | | | | | | | | | | | | | | | |
| Styrene monomer | 412.7 | 1,605.2 | 257.1 | 251.9 | 1,094.7 | 230.1 | 285.3 | 1,031.8 | 276.5 | 59.6 | 966.0 | 61.7 | 105.6 | 1,318.4 | 80.1 |
| By-products | 6.1 | 1,150.9 | 5.3 | 4.0 | 740.7 | 5.4 | 4.0 | 666.7 | 6.0 | 0.8 | 615.4 | 1.3 | 1.4 | 736.8 | 1.9 |
| **Butadiene and By-products** | | | | | | | | | | | | | | | |
| Butadiene | 109.0 | 1,327.6 | 82.1 | 43.2 | 941.2 | 45.9 | 86.7 | 1,015.2 | 85.4 | 13.0 | 747.1 | 17.4 | 65.7 | 2,182.7 | 30.1 |
| By-products | 109.9 | 1,049.7 | 104.7 | 34.7 | 580.3 | 59.8 | 52.6 | 451.9 | 116.4 | 10.0 | 403.2 | 24.8 | 21.9 | 577.8 | 37.9 |
| **Total net sales/ sales volume** | 2,454.9 | — | 1,682.2 | 1,373.7 | — | 1,238.1 | 1,922.9 | | 2,030.8 | 357.7 | — | 406.4 | 629.1 | — | 555.5 |
| Tank and jetty rent | 5.1 | — | — | 3.8 | — | — | 7.3 | — | — | 0.5 | — | — | 3.6 | — | — |
| **Total net revenue** | **2,460.1** | **—** | **—** | **1,377.6** | **—** | **—** | **1,930.3** | **—** | **—** | **358.2** | **—** | **—** | **632.7** | **—** | **—** |

*Cost of revenues.* In 2014, 2015 and 2016, our cost of revenues comprised the cost of goods sold adjusted for the cost of service. The total cost of goods sold comprised total manufacturing costs adjusted for work in process and finished goods. Our total manufacturing cost was primarily composed of the cost of naphtha and benzene, the principal raw materials used in our production operations, as well as direct labour and factory overhead. In 2014, 2015 and 2016, our cost of revenues was US$2,342.6 million, US$1,231.8 million and US$1,436.0 million, respectively and our cost of goods sold was US$2,340.3 million, US$1,229.8 million and US$1,433.8 million, respectively.

The tables below show a breakdown of our total cost of goods sold (consolidated and by segment) for the periods presented.

| | For the year ended 31 December | | | For the three months ended 31 March | |
|---|---|---|---|---|---|
| | **2014** | **2015** | **2016** | **2016** | **2017** |
| | | | *(US$ millions)* | | |
| Raw materials used[(1)] | 1,725.5 | 701.4 | 1,015.0 | 178.6 | 354.2 |
| Direct labour | 29.9 | 27.4 | 34.2 | 10.1 | 16.0 |
| Factory overhead | 262.7 | 216.2 | 272.8 | 64.3 | 65.0 |
| **Total manufacturing costs** | **2,018.0** | **945.0** | **1,321.9** | **253.0** | **435.1** |
| Work in process | | | | | |
| At beginning of year | 10.9 | 15.3 | 10.9 | 10.9 | 12.6 |
| At end of year | (15.3) | (10.9) | (12.6) | (9.8) | (10.2) |
| **Cost of goods manufactured** | **2,013.6** | **949.4** | **1,320.2** | **254.0** | **437.5** |
| Finished goods | | | | | |
| At beginning of year | 116.2 | 66.7 | 58.0 | 58.0 | 70.2 |
| Purchase of finished goods | 277.1 | 271.7 | 125.8 | 26.8 | 18.9 |
| At end of year | (66.7) | (58.0) | (70.2) | (43.0) | (70.8) |
| Total cost of goods sold | 2,340.3 | 1,229.8 | 1,433.8 | 295.8 | 455.8 |
| Cost of service | 2.3 | 2.1 | 2.3 | 0.5 | 0.7 |
| **Total cost of revenues** | 2,342.6 | 1,231.8 | 1,436.0 | 296.3 | 456.4 |

Note:
(1) Raw materials used only include costs of those raw materials that are used in our production process. Under our accounting treatment, only naphtha and benzene are designated as "raw materials". Since we also produce ethylene, propylene and $C_4$, we designate them as "finished goods".

| | For the year ended 31 December | | | For the three months ended 31 March | |
|---|---|---|---|---|---|
| | **2014** | **2015** | **2016** | **2016** | **2017** |
| | | | *(US$ millions)* | | |
| Olefin | 788.4 | 292.6 | 627.7 | 96.0 | 216.5 |
| Polyolefin | 1,212.1 | 732.1 | 601.8 | 151.4 | 172.0 |
| Styrene Monomer | 413.4 | 245.0 | 268.0 | 59.4 | 95.4 |
| Butadiene | 212.6 | 81.9 | 123.9 | 22.4 | 59.7 |
| Total | 2,626.5 | 1,351.6 | 1,621.5 | 329.2 | 543.6 |
| Eliminations | (286.2) | (121.8) | (187.7) | (33.5) | (87.8) |
| Consolidated | 2,340.3 | 1,229.8 | 1,433.8 | 295.8 | 455.8 |

The table below shows a breakdown of our total cost of raw materials consumed for the periods presented.

| | For the year ended 31 December | | | | | | | | | For the three months ended 31 March | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **2014** | | | **2015** | | | **2016** | | | **2016** | | | **2017** | | |
| | *(US$ millions)* | *%* | *Volume (KT)* | *(US$ millions)* | *%* | *Volume (KT)* | *(US$ millions)* | *%* | *Volume (KT)* | *(US$ millions)* | *%* | *Volume (KT)* | *(US$ millions)* | *%* | *Volume (KT)* |
| Naphtha | 1,472.1 | 85.3 | 1,559 | 564.8 | 80.5 | 974 | 880.6 | 86.8 | 2,121 | 151.5 | 84.8 | 409 | 294.8 | 83.2 | 586 |
| Benzene | 253.4 | 14.7 | 197 | 136.5 | 19.5 | 182 | 134.4 | 13.2 | 219 | 27.1 | 15.2 | 48 | 59.4 | 16.8 | 66 |
| Total | 1,725.5 | 100.0 | 1,756 | 701.4 | 100.0 | 1,156 | 1.015.0 | 100.0 | 2,339 | 178.6 | 100.0 | 457 | 354.2 | 100.0 | 651 |

*Operating income (expenses).* Our operating income (expenses) primarily include selling expenses, general and administrative expenses, finance costs and other income (expenses). Selling expenses primarily include insurance and freight, salaries and allowances and others. General and administrative expenses primarily included salaries and allowances, professional fees, post-employment benefit, depreciation and others. In 2014,

2015 and 2016, our operating expenses totalled US$92.5 million, US$89.8 million and US$93.8 million, respectively. The tables below show a breakdown of selling expenses, general and administrative expenses for the periods presented.

| | For the year ended 31 December | | | For the three months ended 31 March | |
|---|---|---|---|---|---|
| | **2014** | **2015** | **2016** | **2016** | **2017** |
| | | | *(US$ millions)* | | |
| **Selling Expenses** | | | | | |
| Freight and insurance | 39.9 | 39.1 | 38.7 | 8.6 | 10.7 |
| Salaries and allowances | 1.2 | 1.3 | 1.8 | 0.5 | 1.1 |
| Depreciation | 0.2 | 0.4 | 0.6 | 0.2 | 0.2 |
| Others | 1.2 | 0.9 | 1.5 | 0.5 | 0.3 |
| **Total** | **42.5** | **41.7** | **42.6** | **9.8** | **12.3** |

| | For the year ended 31 December | | | For the three months ended 31 March | |
|---|---|---|---|---|---|
| | **2014** | **2015** | **2016** | **2016** | **2017** |
| | | | *(US$ millions)* | | |
| **General and Administrative Expenses** | | | | | |
| Salaries, allowances and employee benefits | 17.4 | 16.7 | 18.9 | 5.5 | 11.5 |
| Professional fees | 1.6 | 1.1 | 1.1 | 0.4 | 0.3 |
| Depreciation | 1.1 | 1.2 | 0.7 | 0.2 | 0.2 |
| Others | 4.6 | 5.8 | 7.2 | 1.3 | 2.1 |
| **Total** | **24.7** | **24.8** | **27.9** | **7.4** | **14.1** |

*Finance costs.* Finance costs primarily include interest expenses, bank charges and tax on interest expense. The tables below show a breakdown of finance costs for the periods presented.

| | For the year ended 31 December | | | For the three months ended 31 March | |
|---|---|---|---|---|---|
| | **2014** | **2015** | **2016** | **2016** | **2017** |
| | | | *(US$ millions)* | | |
| **Finance costs** | | | | | |
| Interest expenses on: | | | | | |
| Bank loans | 23.9 | 13.8 | 25.4 | 4.0 | 6.8 |
| Others | 1.1 | 1.6 | 1.1 | 0.5 | 1.1 |
| Total interest on financial liabilities not classified as at Fair Value Through Profit or Loss ("FVTPL") | 25.0 | 15.4 | 26.5 | 4.5 | 7.9 |
| Bank charges | 5.7 | 5.5 | 3.6 | 0.7 | 1.7 |
| Tax on interest expense | 1.2 | 1.6 | 1.7 | 0.4 | 0.3 |
| **Total** | **31.9** | **22.5** | **31.9** | **5.6** | **9.9** |

*Other income (expenses).* Our other income (expenses) primarily includes gain (loss) on derivative financial instruments, share in net loss of an associate, loss on foreign exchange (net) and other gains and losses (net). The table below shows a breakdown of our other income for the three months period for the periods indicated.

| | For the year ended 31 December | | | For the three months ended 31 March | |
|---|---|---|---|---|---|
| | **2014** | **2015** | **2016** | **2016** | **2017** |
| | | | *(US$ millions)* | | |
| Gain (loss) on derivative financial instruments | (2.6) | (1.5) | 0.6 | (0.2) | 0.6 |
| Share in net loss of an associate | (0.8) | (3.7) | (5.9) | (1.4) | (1.8) |
| Gain (loss) on foreign exchange – net | (3.5) | (11.5) | (1.3) | 6.9 | 1.9 |
| Other gains and losses – net | 13.5 | 16.0 | 15.2 | 6.2 | 2.3 |
| **Total** | **6.6** | **(0.7)** | **8.6** | **11.5** | **3.0** |

*Income tax benefit (expense).* Our income tax benefit or expense comprised current tax and deferred tax. Current tax was calculated based on the taxable income for the year computed using prevailing tax rates. Deferred tax assets and liabilities were recognised for the future tax consequences attributable to differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax bases. Deferred tax

liabilities were recognised for all taxable temporary differences and deferred tax assets are recognised for deductible temporary differences to the extent that it was probable that taxable income would be available in future periods against which the deductible temporary differences could be utilised. Deferred tax was calculated at the tax rates that had been enacted or substantively enacted as of the balance sheet date. The table below shows a breakdown of our income tax expense (benefit) and deferred tax expense (benefit) for the periods presented.

| | For the year ended 31 December | | | For the three months ended 31 March | |
|---|---|---|---|---|---|
| | **2014** | **2015** | **2016** | **2016** | **2017** |
| | | | *(US$ millions)* | | |
| Current Tax | (0.2) | (21.1) | (102.2) | (15.3) | (29.7) |
| Deferred Tax | | | | | |
| Company | (7.3) | (12.9) | 2.7 | 3.0 | 0.5 |
| SMI | (0.1) | (0.9) | 1.4 | (0.2) | 0.4 |
| PBI | 1.2 | 5.3 | (2.3) | 0.3 | (6.4) |
| Total deferred tax expense (benefit) | (6.2) | (8.5) | (1.8) | 3.1 | (5.5) |
| **Total** | **(6.4)** | **(29.6)** | **(100.4)** | **(12.2)** | **(35.2)** |

On 14 January 2016, we received the results of 2014 income tax audit from the Director General of Tax ("**DGT**"), which stated that our taxable income in 2014 of US$44.9 million was modified to be US$60.9 million.

On 29 November 2016, the Company received tax facility benefit for an ethylene cracker expansion project from DGT, which allows a reduction in net taxable income of up to 30% of the amount invested in property, plant and equipment, totalling to Rp 3.5 trillion (US$260.5 million), per annum at 5% for six years of commercial production.

***Three months ended 31 March 2017 compared to the three months ended 31 March 2016***

The following discussion compares certain results of us for three months ended 31 March 2017 compared to the three months period ended 31 March 2016.

*Net revenues.* Our net revenues increased by 76.6% to US$632.7 million for the three months ended 31 March 2017 compared to US$358.2 million for the three months ended 31 March 2016. The increase in net revenues reflected a 36.7% growth in sales volume and an increase in the average sale price for our products during the period. The higher sales volume for the period was primarily due to higher levels of production following the successful completion of our cracker expansion project, which we completed in December 2015, followed by a ramp-up period during the first quarter of 2016. During the three months ended 31 March 2017, our net sales for olefins, polyolefins, styrene monomer and its by-products and butadiene and its by-products amounted to US$195.8 million, US$238.7 million, US$107.0 million and US$87.6 million, respectively. Net sales attributable to each of our main products are set forth below.

*Olefins (ethylene, propylene, pygas and mixed $C_4$).* In the three months ended 31 March 2017, our net sales increased by 140.8% to US$195.8 million compared to US$81.3 million in the three months ended 31 March 2016, primarily attributable to the successful completion of our cracker expansion project in December 2015 and lower production in the first quarter of 2016 due to a ramp-up period.

- *Ethylene.* Our net ethylene sales increased by 181.3% to US$132.2 million in the three months ended 31 March 2017 compared to US47.0 million in the three months ended 31 March 2016, in line with a 146.3% increase in sales volumes of ethylene to 125.1 KT in the three months ended 31 March 2017 from 50.8 KT in the three months ended 31 March 2016. Sales volumes were low in the three months ended 31 March 2016 because of the ramp-up period following our naphtha cracker expansion project which we completed in December 2015, which subsequently lowered production rates in the three months ended 31 March 2016. The average sales prices per tonne of ethylene was 14.2% higher at US$1,056.6/MT in the three months ended 31 March 2017 compared to US$925.2/MT in the three months ended 31 March 2016.

- *Propylene.* Our net propylene sales increased by 15.4% to US$13.5 million in the three months ended 31 March 2017 compared to US$11.7 million in the three months ended 31 March 2016, largely due to a 49.6% increase in the average sales prices per tonne of propylene to

US$964.3/MT in the three months ended 31 March 2017 compared to US$644.8/MT in the three months ended 31 March 2016.

- *Pygas.* Our net pygas sales increased by 103.6% to US$44.8 million in the three months ended 31 March 2017 compared to US$22.0 million in the three months ended 31 March 2016. This was partly due to a 32.1% increase in sales volumes of pygas to 70.0 KT in the three months ended 31 March 2017 compared to 53.0 KT in the three months ended 31 March 2016. Sales volumes were low in the three months ended 31 March 2016 because of the ramp-up period following our naphtha cracker expansion project which we completed in December 2015, which subsequently lowered production rates in the three months ended 31 March 2016. The average sales prices per tonne of pygas was 54.2% higher at US$640.4/MT in the three months ended 31 March 2017 compared to US$415.4/MT in the three months ended 31 March 2016.

- *Mixed $C_4$.* Our net mixed $C_4$ sales increased by 783.3% to US$5.3 million in the three months ended 31 March 2017 compared to US$0.6 million in the three months ended 31 March 2016, in line with a 200.0% increase in sales volumes of mixed $C_4$ to 5.4 KT in the three months ended 31 March 2017 from 1.8 KT in the three months ended 31 March 2016. Sales volumes were low in the three months ended 31 March 2016 because of the ramp-up period following our naphtha cracker expansion project which we completed in December 2015, which subsequently lowered production rates in the three months ended 31 March 2016. The average sales prices per tonne of mixed $C_4$ was 187.3% higher at US$984.7/MT in the three months ended 31 March 2017 compared to US$342.7/MT in the three months ended 31 March 2016.

- *Polyolefin (polyethylene and polypropylene).* Our net polyolefin sales increased by 23.7% to US$238.7 million in the three months ended 31 March 2017 compared to US$193.0 million in the three months ended 31 March 2016, primarily reflecting the ramp-up period following our naphtha cracker expansion project which we completed in December 2015, which subsequently lowered production rates in the three months ended 31 March 2016.

  - *Polyethylene.* Our net sales of polyethylene increased by 16.1% to US$94.6 million in the three months ended 31 March 2017 compared to US$81.5 million in the three months ended 31 March 2016. This was largely due to a 13.4% increase in sales volumes of polyethylene to 77.0 KT in the three months ended 31 March 2017 from 67.9 KT in the three months ended 31 March 2016. Sales volumes were low in the three months ended 31 March 2016 as a result of lower feedstock availability with the ramp-up period of the naphtha cracker. The increase was in line with a 2.4% increase in average sales price per tonne of polyethylene to US$1,228.4/MT in the three months ended 31 March 2017 from US$1,199.7/MT in the three months ended 31 March 2016.

  - *Polypropylene.* Our net sales of polypropylene increased by 29.2% to US$144.1 million in the three months ended 31 March 2017 compared to US$111.5 million in the three months ended 31 March 2016. This was largely due to a 4.1% increase in the sales volumes of polypropylene to 114.1 KT in the three months ended 31 March 2017 compared to 109.6 KT in the three months ended 31 March 2016 and a 24.2% increase in the average sales price per tonne of polypropylene to US$1,263.2/MT in the three months ended 31 March 2017 compared to US$1,017.3/MT in the three months ended 31 March 2016.

- *Styrene monomer and by-products.* Our net sales of styrene monomer increased by 76.9% to US$107.0 million in the three months ended 31 March 2017 compared to US$60.4 million in the three months ended 31 March 2016. This was largely due to a 30.2% increase in sales volumes of styrene monomer and its by-products to 82.0KT in the three months ended 31 March 2017 compared to 63.0KT in the three months ended 31 March 2017 and a 36.5% increase in the average sales price per tonne of styrene monomer to US$1,318.4/MT in the three months ended 31 March 2017 compared to US$966.0/MT in the three months ended 31 March 2016.

- *Butadiene and by-products.* Our net sales of butadiene and its by-products increased by 280.4% to US$87.5 million in the three months ended 31 March 2017 compared to US$23.0 million in the three months ended 31 March 2016. This was largely due to a 60.8% increase in sales volumes of butadiene and its by-products to 68.0KT in the three months ended 31 March 2017 from 42.3KT in the three

months ended 31 March 2016 and a 192.2% increase in the average sales price per tonne of butadiene to US$2,182.7/MT in the three months ended 31 March 2017 compared to US$747.1/MT in the three months ended 31 March 2016.

*Cost of revenues.* For the three months period ended 31 March 2017 and 31 March 2016, our cost of revenues comprised cost goods sold and cost of service. Our cost of goods sold comprised total manufacturing cost adjusted for work in process and finished goods. Our total manufacturing cost primarily comprised the cost of naphtha and benzene, our principal raw materials used, which represent 81.4% and 70.6% of our total manufacturing cost for the three months ended 31 March 2016 and 31 March 2017, respectively, direct labour and factory overhead. Our cost of revenues increased by 54.0% to US$456.4 million for the three months ended 31 March 2017 compared to US$296.3 million for the three months ended 31 March 2016, primarily due to increased consumption of naphtha, which is our primary feedstock, due to higher production levels. The average price per tonne of naphtha, which is linked to the price of Brent crude oil, increased 34.7% to US$506.7/MT in the three months ended 31 March 2017 from US$376.1/MT in the three months ended 31 March 2016. In addition, the average price per tonne of benzene, which is the main raw material for styrene monomer, increased by 60.2% to US$907.8/MT in the three months ended 31 March 2017 from US$566.5/MT in the three months ended 31 March 2016.

The tables below show a breakdown of our total cost of revenues (consolidated and by segment) for the periods presented.

| | For the three months ended 31 March | |
|---|---|---|
| | **2016** | **2017** |
| | *(US$ millions)* | |
| Raw materials used | 178.6 | 354.2 |
| Direct labour | 10.1 | 16.0 |
| Factory overhead | 64.3 | 65.0 |
| **Total manufacturing costs** | **253.0** | **435.1** |
| Work in process | | |
| At beginning of period | 10.9 | 12.6 |
| At end of period | (9.8) | (10.2) |
| **Cost of goods manufactured** | **254.0** | **437.5** |
| Finished goods | | |
| At beginning of period | 58.0 | 70.2 |
| Purchase of finished goods | 26.8 | 18.9 |
| At end of period | (43.0) | (70.8) |
| Total cost of goods sold | 295.8 | 455.8 |
| Cost of service | 0.5 | 0.7 |
| **Total cost of revenues** | **296.3** | **456.4** |

The table below sets forth our cost of revenues for each product for the periods presented:

| | For the three months ended 31 March | |
|---|---|---|
| | **2016** | **2017** |
| | *(US$ millions)* | |
| Olefin | 96.0 | 216.5 |
| Polyolefin | 151.4 | 172.0 |
| Styrene Monomer | 59.4 | 95.4 |
| Butadiene | 22.4 | 59.7 |
| Total | 329.2 | 543.6 |
| Eliminations | (33.5) | (87.8) |
| Consolidated | 295.8 | 455.8 |

- *Olefins (ethylene, propylene, pygas and mixed $C_4$).* Our cost of revenues of olefins increased by 105.1% to US$129.2 million in the three months ended 31 March 2017 compared to US$63.0 million in the three months ended 31 March 2016, primarily reflecting higher production levels compared to the first quarter 2016, with the ramp-up period of our naphtha cracker after completion of our cracker expansion project in December 2015, as well as higher raw material costs, primarily naphtha, and a 73.4% increase in our olefins sales volume to 214.5KT in the three months ended 31 March 2017 compared to 123.7KT in the three months ended 31 March 2016.

- *Polyolefin (polyethylene and polypropylene).* Our cost of revenues of polyolefins increased by 13.6% to US$172.0 million in the three months ended 31 March 2017 compared to US$151.4 million in the three months ended 31 March 2016, primarily reflecting higher production levels, as well as a 7.7% increase in our polyolefin sales volumes to 191.1KT in the three months ended 31 March 2017 compared to 177.5KT in the three months ended 31 March 2016.

- *Styrene monomer and by-products.* Our cost of revenues of styrene monomer and its by-products increased by 60.8% to US$94.9 million in the three months ended 31 March 2017 compared to US$59.0 million in the three months ended 31 March 2016, primarily reflecting higher production from improving plant performance and market conditions. Sales volumes increased by 30.2% to 82.0KT in the three months ended 31 March 2017 compared to 63.0 KT in 2015.

- *Butadiene and by-products.* Our cost of revenues of butadiene and its by-products increased by 166.5% to US$59.7 million in the three months ended 31 March 2017 compared to US$22.4 million in the three months ended 31 March 2016, primarily reflecting higher production, with more feedstock being available for use following the completion of our cracker expansion project. Sales volumes increased by 60.8% to 68.0KT in the three months ended 31 March 2017 compared to 42.3KT in the three months ended 31 March 2016.

*Gross profit (loss).* Our gross profit increased by 184.8% to US$176.3 million for the three months ended 31 March 2017 compared to US$61.9 million for the three months ended 31 March 2016, primarily due to higher volumes from increased production capacity and higher product margins. Our gross profit margins for the three months ended 31 March 2017 and 31 March 2016 were 27.9% and 17.3% respectively.

The table below sets forth our gross profit (loss) for each product category for the periods presented:

| | For the three months ended 31 March | |
|---|---|---|
| | **2016** | **2017** |
| | *(US$ millions)* | |
| Olefin | 18.2 | 66.5 |
| Polyolefin | 41.6 | 66.8 |
| Styrene monomer | 1.5 | 12.1 |
| Butadiene | 0.5 | 27.8 |

*Other operating income (expenses).* Our other operating income (expenses) for the three month periods ended 31 March 2017 and 31 March 2016 primarily included selling expenses, general and administrative expenses, finance costs and other income (expenses). The table below shows a breakdown of our selling expenses for the periods presented.

| | For the three months ended 31 March | |
|---|---|---|
| | **2016** | **2017** |
| | *(US$ millions)* | |
| **Selling Expenses** | | |
| Freight and insurance | 8.6 | 10.7 |
| Salaries and allowances | 0.5 | 1.1 |
| Depreciation | 0.2 | 0.2 |
| Others | 0.5 | 0.3 |
| **Total** | 9.8 | 12.3 |

The table below shows a breakdown of our general and administrative expenses for the periods presented.

| | For the three months ended 31 March | |
|---|---|---|
| | **2016** | **2017** |
| | *(US$ millions)* | |
| **General and Administrative Expenses** | | |
| Salaries, allowances and employee benefits | 5.5 | 11.5 |

| | For the three months ended 31 March | |
|---|---|---|
| | 2016 | 2017 |
| | *(US$ millions)* | |
| Professional fees | 0.4 | 0.3 |
| Depreciation | 0.2 | 0.2 |
| Others | 1.3 | 2.1 |
| **Total** | 7.4 | 14.1 |

The table below shows a breakdown of our finance costs for the periods presented.

| | For the three months ended 31 March | |
|---|---|---|
| | 2016 | 2017 |
| | *(US$ millions)* | |
| **Finance costs** | | |
| Interest expenses on: | | |
| Bank loans | 4.0 | 6.8 |
| Bonds payable | — | 1.1 |
| Others | 0.5 | 0.0 |
| Total interest on financial liabilities not classified as at FVTPL[(1)] | 4.5 | 7.9 |
| Bank charges | 0.7 | 1.7 |
| Tax on interest expense | 0.4 | 0.3 |
| **Total** | 5.6 | 9.9 |

Note:
(1) Fair value through profit or loss.

The table below shows a breakdown of our other income (expense) for the periods presented.

| | For the three months ended 31 March | |
|---|---|---|
| | 2016 | 2017 |
| | *(US$ millions)* | |
| Gain (loss) on derivative financial instruments | (0.2) | 0.6 |
| Share in net loss of an associate | (1.4) | (1.8) |
| Loss on foreign exchange – net | 6.9 | 1.9 |
| Other gains and losses - net | 6.2 | 2.5 |
| **Total** | 11.4 | 3.2 |

*Income tax expense - net.* Our income tax expense - net was US$35.2 million for the three months ended 31 March 2017 compared to US$12.2 million for the three months ended 31 March 2016.

*Profit for the period.* In view of the foregoing, our profit for the three months ended 31 March 2017 amounted to US$107.8 million.

***The Year Ended 31 December 2016 Compared to the Year Ended 31 December 2015***

The following discussion compares our operating results for the year ended 31 December 2016 to the year ended 31 December 2015.

*Net revenues.* Our net revenues increased by 28.6% to US$1,930.3 million in 2016 compared to US$1,377.6 million in 2015. The increase in net revenues reflected a 64% growth in sales volume, partially offset by a 15% decrease in the average sale price for our products in 2016. The higher sales volume for 2016 was principally due to higher levels of production following the successful completion of our cracker expansion project by 43% to 860 KTA, which we completed in December 2015. In 2016, our net sales for olefins, polyolefins, styrene monomer and butadiene amounted to US$609.8 million, US$884.6 million, US$289.2 million and US$139.3 million, respectively. Net sales attributable to each of our main products are set forth below.

- *Olefins (ethylene, propylene, pygas and mixed $C_4$).* In 2016, our net sales increased by 256.4% to US$609.8 million compared to US$171.1 million in 2015, primarily attributable to the successful completion of our cracker expansion project in December 2015.

- *Ethylene.* Our net ethylene sales increased by 341.9% to US$375.2 million in 2016 compared to US$84.9 million in 2015, in line with a 362.1% increase in sales volumes of ethylene to 380.8 KT in 2016 from 82.4 KT in 2015. Sales volumes were low in 2015 because of the 85-day shutdown during our scheduled TAM and expansion tie-in works in the latter part of the year, which also lowered our production levels for the year. Sales volumes increased in 2016 due to our cracker expansion project, which we completed in December 2015. The average sales prices per tonne of ethylene was 4.4% lower at US$985.3/MT in 2016 compared to US$1,030.3/MT in 2015.

- *Propylene.* Our net propylene sales increased by 326.2% to US$109.1 million in 2016 compared to US$25.6 million in 2015, largely due to a 381.8% increase in sales volumes of propylene to 153.2 KT in 2016 compared to 31.8 KT in 2015. Sales volumes were low in 2015 as a result of our 85-day shutdown during our scheduled TAM and expansion tie-in works in the latter part of the year, which also lowered our production levels for the year. The average sales prices per tonne of propylene was 11.5% lower at US$712.1/MT in 2016 compared to US$805/MT in 2015.

- *Pygas.* Our net pygas sales increased by 75.6% to US$106.4 million in 2016 compared to US$60.6 million in 2015. This was largely due to a 120.7% increase in sales volumes of pygas to 235.5KT in 2016 compared to 106.7KT in 2015, as a result of higher production for pygas and by-products and lower average sales prices per tonne of pygas. The average sales prices per tonne of pygas was 20.4% lower at US$451.8/MT in 2016 compared to US$567.9/MT in 2015.

- *Mixed $C_4$.* Our net mixed C4 sales were US$19.1 million in 2016 compared to nil in 2015, as the excess mixed $C_4$ following our cracker expansion project was sold instead of being consumed as raw materials by our wholly owned subsidiary, PT Petrokimia Butadiene Indonesia ("**PBI**"), to produce butadiene.

- *Polyolefin (polyethylene and polypropylene).* Our net polyolefin sales increased by 1.8% to US$884.6 million in 2016 compared to US$868.9 million in 2015, primarily reflecting the results of our cracker expansion project, which we completed in December 2015.

  - *Polyethylene.* Our net sales of polyethylene increased by 25.6% to US$387.1 million in 2016 compared to US$308.2 million in 2015. This was largely due to a 39.1% increase in sales volumes of polyethylene to 315.8KT in 2016 from 227.0KT in 2015 as a result of higher production after the 85-day shutdown for our scheduled TAM and our cracker expansion project. This increase was partially offset by a 9.7% decrease in average sales price per tonne of polyethylene to US$1,225.8/MT in 2016 from US$1,357.7/MT in 2015, in part reflecting lower feedstock costs.

  - *Polypropylene.* Our net sales of polypropylene decreased by 11.4% to US$497.5 million in 2016 compared to US$560.7 million in 2015. This was largely due to a 4.9% decrease in sales volumes of polypropylene to 426.9KT in 2016 compared to 449.0KT in 2015. Average sales price per tonne of polypropylene decreased by 6.7% to US$1,165.4/MT in 2016 compared to US$1,248.8/MT in 2015, in part reflecting lower feedstock costs.

- *Styrene monomer and by-products.* Our net sales of styrene monomer increased by 13.1% to US$289.2 million in 2016 compared to US$255.8 million in 2015. This was largely due to a 20.2% increase in sales volumes of styrene monomer to 282.5KT in 2016 compared to 235.0KT in 2015 mainly due to improved plant performance and market conditions. The average sales price per tonne of styrene monomer decreased by 6.0% at US$1,023.7/MT in 2016 compared to US$1,088.5/MT in 2015, in part reflecting lower feedstock costs.

- *Butadiene and by-products.* Our net sales of butadiene and its by-products increased by 78.8% to US$139.3 million in 2016 compared to US$77.9 million in 2015. This was largely due to a 92.3% increase in sales volumes of butadiene to 201.9KT in 2016 from 105.0KT in 2015 as a result of higher production, which was possible due to more feedstock being available for use as a result of increased capacity after the 85-day shutdown for TAM and our cracker expansion project. The average sales price

per tonne of butadiene decreased by 7.0% to US$689.9/MT in 2016 compared to US$741.9/MT in 2015, in part reflecting lower feedstock costs.

*Cost of revenues.* Our cost of revenues increased 16.6% in 2016 to US$1,436.0 million as compared to US$1,231.8 million in 2015. The increase in cost of revenues was mainly due to our increased consumption of naphtha, which is our primary raw material, due to higher production as a result of our expanded ethylene capacity after the completion of TAM and expansion tie-in works in December 2015. The average cost of naphtha per ton, which is linked to Brent crude prices, decreased by 25.7% to US$410/MT compared to US$552/MT in 2015. Similarly, the average cost per tonne of benzene, which is the primary raw material for styrene monomer, decreased by 14.8% to US$614/MT compared to US$721/MT in 2015. A description of our cost of revenues by main products is given below.

- *Olefins (ethylene, propylene, pygas and mixed $C_4$).* In 2016, our cost of revenues of olefins increased by 156.1% to US$444.2 million compared to US$172.7 million in 2015, primarily reflecting higher production as a result of the increased nameplate capacity of our naphtha cracker after the completion of our cracker expansion project, which we completed in December 2015, as well as an increase in our olefins sales volume, which increased by 263.9% to 803.9KT in 2016 compared to 220.9KT in 2015.

- *Polyolefin (polyethylene and polypropylene).* Our cost of revenues of polyolefin decreased by 17.8% to US$601.8 million in 2016 compared to US$732.1 million in 2015, primarily reflecting higher production as a result of our cracker expansion project, which we completed in December 2015, as well as an increase in our polyolefin sales volume, which increased by 9.9% at 742.7KT in 2016 compared to 676.0KT in 2015.

- *Styrene monomer and by-products.* Our cost of revenues of styrene monomer and by-products increased by 9.5% to US$266.1 million in 2016 compared to US$243.1 million in 2015, primarily reflecting higher production from the improvement of plant performance and market conditions. Sales volumes increased by 20.2% to 282.5KT in 2016 compared to 235KT in 2015. Average sale prices per tonne were 6.0% lower at US$1,023.7/MT in 2016 compared to US$1,088.5/MT in 2015.

- *Butadiene and by-products.* Our cost of revenues of butadiene increased by 51.3% to US$123.9 million in 2016 compared to US$81.9 million in 2015, primarily reflecting higher production, which was possible with more feedstock being available for use after the 85-day shutdown for TAM and our cracker expansion project. Sales volumes increased by 92.3% to 201.9KT in 2016 compared to 105.0KT in 2015. Average sale prices per tonne were 7.0% lower at US$689.9/MT in 2016 compared to US$741.9/MT in 2015.

*Gross profit (loss).* As a result of the foregoing factors, namely, higher production as made possible with a 43% increase in our increased production capacity, higher product margins reflecting an upward trend in the industry and low crude oil prices, our gross profit increased by 239.2% in 2016 to US$494.3 million compared to US$145.7 million in 2015. A description of our gross profit by main products is given below.

- *Olefins (ethylene, propylene, pygas and mixed $C_4$).* In 2016, our gross profit for olefins increased to US$167.6 million compared to a gross loss of US$1.6 million in 2015.

- *Polyolefin (polyethylene and polypropylene).* In 2016, our gross profit for polyolefin increased by 106.6% to US$282.8 million compared to a gross profit of US$136.9 million in 2015.

- *Styrene monomer and by-products.* In 2016, our gross profit for styrene monomer increased by 81.9% to US$23.1 million compared to a gross profit of US$12.7 million in 2015.

- *Butadiene and by-products.* In 2016, our gross profit for butadiene increased to US$15.4 million compared to a gross loss of US$4.0 million in 2015.

*Operating income (expenses).* Our operating income (expenses) increased by 4.5% to US$93.8 million in 2016 compared to US$89.8 million in 2015, primarily due to higher salaries expense, finance costs with the completion of our cracker expansion project and share of net loss of an associate, partially offset by lower foreign exchange loss.

*Other income (charges) — net.* Our other income — net amounted to US$8.6 million in 2016 compared to other charges — net of US$0.8 million in 2015, mainly due to higher salaries expense, finance costs with the completion of our cracker expansion project and share of net loss of an associate, partially offset by lower foreign exchange loss.

*Income tax benefit (expense).* Our income tax expense as a percentage of profit before tax (effective tax rates) was approximately 25.1% in 2015. Our income tax expense increased by 239.2% to US$100.4 million in 2016 compared to US$29.6 million in 2015, primarily due to higher profit before tax in 2016 as compared to 2015.

*Net profit (loss) for the year.* In view of the foregoing, our net profit for the year amounted to US$300.1 million in 2016 as compared to US$26.3 million in 2015. Our net profit for the year attributable to owners of the parent entity amounted to US$300 million in 2016, compared to US$26.3 million in 2015. Our net profit for the year attributable to non-controlling interests of PT Redeco Petrolin Utama ("**RPU**"), a subsidiary of SMI, amounted to US$0.1 million, compared to a loss of US$0.1 million in 2015.

***The Year Ended 31 December 2015 Compared to the Year Ended 31 December 2014***

The following discussion compares our operating results for the year ended 31 December 2015 to the year ended 31 December 2014.

*Net revenues.* Our net revenues decreased by 44.0% to US$1,377.6 million in 2015 compared to US$2.460.1 million in 2014. The decrease in net revenues was due to a 26.4% decrease in sales volume to 1,236.9KT in 2015 from 1,681.0KT in 2014 and a 24% decrease in the average sales price for our products. The lower sales volume for 2015 was due to lower production arising from an 85-day shutdown of our naphtha cracker as a result of TAM and expansion tie-in works and lower average sales prices, which mirrored lower crude oil prices. In 2015, our net sales for olefins, polyolefins, styrene monomer and butadiene amounted to US$774.2 million, US$1,285.4 million, US$1,088.5 million and US$741.9 million, respectively. A breakdown of our net sales by main product is given below.

- *Olefins (ethylene, propylene, pygas and mixed C4).* In 2015, our net sales of olefins decreased by 66.7% to US$171.1 million compared to US$514.4 million in 2014, primarily reflecting lower production levels caused by our 85-day shutdown during our scheduled TAM and expansion tie-in works in conjunction with our cracker expansion project.

    - *Ethylene.* Our net ethylene sales decreased by 67.5% to US$84.9 million in 2015 compared to US$261.4 million in 2014. This was primarily due to a 56.8% decrease in sales volumes of ethylene to 82.4KT in 2015 from 190.0KT in 2014, which was a result of lower production levels caused by our 85-day shutdown during our scheduled TAM and expansion tie-in works in conjunction with our cracker expansion project. In addition, the average sales prices per tonne of ethylene was 25.1% lower at US$1,030.3/MT in 2015 compared to US$1,375.8/MT in 2014.

    - *Propylene.* Our net propylene sales decreased by 41.3% to US$25.6 million in 2015 compared to US$43.6 million in 2014, largely due to a decrease in the average sales prices per tonne of propylene. The average sales prices per tonne of propylene was 40.9% lower at US$805.0/MT in 2015 compared to US$1,362.5/MT in 2014.

    - *Pygas.* Our net pygas sales decreased by 68.7% to US$60.6 million in 2015 compared to US$193.9 million in 2014. This was largely due to a 46.1% decrease in sales volumes of pygas to 106.7KT in 2015 compared to 198.0KT in 2014, as a result of lower production of pygas and its by-products and lower average sales prices per tonne of pygas. The average sales prices per tonne of pygas was 42.0% lower at US$567.9/MT in 2015 compared to US$979.3/MT in 2014.

    - *Mixed $C_4$.* Our net mixed $C_4$ sales was nil in 2015 compared to 28.0KT in 2014 as we used all of the mixed $C_4$ that we produced as raw materials for PBI.

- *Polyolefin (polyethylene and polypropylene).* Our net polyolefin sales decreased by 33.3% to US$868.9 million in 2015 compared to US$1,302.8 million in 2014, primarily reflecting lower production of polyethylene as a result of our scheduled TAM and expansion tie-in works.

    - *Polyethylene.* Our net sales of polyethylene decreased by 40.3% to US$308.2 million in 2015 compared to US$516.1 million in 2014. This was largely due to (i) a 25.0% decrease in average sales price per tonne of polyethylene to US$1,357.7/MT in 2015 from US$1,643.6/MT in 2014 and (ii) a 27.7% decrease in sales volumes of polyethylene to 227.0KT in 2015 from 314.0KT in 2014, primarily caused by lower production of polyethylene as a result of our scheduled TAM and expansion tie-in works.

    - *Polypropylene.* Our net sales of polypropylene decreased by 28.7% to US$560.7 million in 2015 compared to US$786.7 million in 2014. This was largely due to a 4.7% decrease in sales volumes of polypropylene to 449.0KT in 2015 compared to 471.0KT in 2014. The average sales price per tonne of polypropylene was 25.2% lower at US$1,248.8/MT in 2015 compared to US$1,670.3/MT in 2014.

- *Styrene monomer.* Our net sales of styrene monomer decreased by 38.9% to US$255.8 million in 2015 compared to US$418.8 million in 2014. This was largely due to a 10.3% decrease in sales volumes of styrene monomer to 235.0KT in 2015 compared to 262.0KT in 2014 mainly due to market conditions. The average sales prices per tonne of styrene monomer was 31.9% lower at US$1,088.5/MT in 2015 compared to US$1,598.5/MT in 2014.

- *Butadiene.* Our net sales of butadiene decreased by 64.4% to US$77.9 million in 2015 compared to US$218.9 million in 2014. This was largely due to a 43.5% decrease in sales volumes of butadiene to 105.0KT in 2015 compared to 186.0KT in 2014, primarily caused by lower production of butadiene as a result of our scheduled TAM and expansion tie-in works. The average sales prices per tonne of butadiene was 37.0% lower at US$741.9/MT in 2015 compared to US$1,176.9/MT in 2014.

*Cost of revenues.* Our cost of revenues sold decreased 47.4% in 2015 to US$1,231.8 million as compared to US$2,342.6 million in 2014. The decrease in the cost of revenues was mainly due to the decreased consumption of naphtha due to lower production, mainly resulting from our TAM and expansion tie-in works coupled with lower naphtha cost. The average cost of naphtha per tonne decreased by 40.7% to US$552/MT compared to US$931/MT in 2014. Similarly, the average cost of benzene per tonne decreased by 43.6% to US$721/MT compared to US$1,280/MT in 2014. A description of our cost of goods sold by main products is given below.

- *Olefins (ethylene, propylene, pygas and mixed $C_4$).* In 2015, our cost of goods sold of olefins decreased by 65.7% to US$172.7 million compared to US$504.1 million in 2014, primarily reflecting lower production levels caused by our 85-day shutdown during our scheduled TAM and expansion tie-in works in conjunction with our cracker expansion project, as well as a decrease in our olefins sales volume by 50.7% at 221KT in 2015 compared to 448KT in 2014.

- *Polyolefin (polyethylene and polypropylene).* Our cost of goods sold of polyolefin decreased by 39.6% to US$732.1 million in 2015 compared to US$1,212.1 million in 2014, primarily reflecting lower production of polyethylene as a result of our scheduled TAM and expansion tie-in works, as well as a decrease in our polyolefin sales volume by 13.9% at 676KT in 2015 compared to 785KT in 2014.

- *Styrene monomer and by-products.* Our cost of goods sold of styrene monomer and by-products decreased by 40.9% to US$243.1 million in 2015 compared to US$411.5 million in 2014, primarily reflecting lower production of styrene monomer. Sales volumes were lower by 10.3% at 235KT in 2015 compared to 262KT in 2014. Average sale prices per tonne were 31.9% lower at US$1,088.5/MT in 2015 compared to US$1,598.5/MT in 2014.

- *Butadiene.* Our cost of goods sold of butadiene decreased by 61.5% to US$81.9 million in 2015 compared to US$212.6 million in 2014, primarily reflecting lower production of butadiene as a result of our scheduled TAM and expansion tie-in works. Sales volumes were lower by 43.5% at 105KT in 2015 compared to 186KT in 2014. Average sale prices per tonne were 37.0% lower at US$741.9/MT in 2015 compared to US$1,176.9/MT in 2014.

*Gross profit (loss).* Despite the foregoing factors, our gross profit increased by 24.1% in 2015 to US$145.7 million compared to US$117.5 million in 2014. A description of our gross profit by main products is given below.

- *Olefins (ethylene, propylene, pygas and mixed C4).* In 2015, our gross loss for olefins was US$1.6 million, a decreased of 115.5% compared to a gross profit of US$10.3 million in 2014.

- *Polyolefin (polyethylene and polypropylene).* In 2015, our gross profit for polyolefin increased 50.8% to US$136.9 million compared to a gross profit of US$90.8 million in 2014.

- *Styrene monomer.* In 2015, our gross profit for styrene monomer increased 74.0% to US$12.7 million compared to a gross profit of US$7.3 million in 2014.

- *Butadiene.* In 2015, our gross loss for butadiene was US$4.0 million, a decrease of 164.5% to US$4.0 million compared to a gross profit of US$6.2 million in 2014.

*Operating income (expenses).* Our operating expenses decreased by 2.9% to US$89.8 million in 2015 compared to US$92.5 million in 2014, primarily due to lower finance costs as a result of principal repayments and capitalised interests to our cracker expansion project, higher other income due to land sales, partially offset by share of net loss of an associate and loss of foreign exchange.

*Other income (charges) — net.* Our other charges — net amounted to US$0.8 million in 2015 compared to other income — net, of US$6.6 million in 2014, mainly due gain from to land sales.

*Income tax benefit (expense).* Our income tax expense as a percentage of income before tax (effective tax rates) was approximately 53.0% in 2015. Our income tax expense increased by 362.5% to US$29.6 million in 2015 compared to US$6.4 million in 2014, due to adjustments arising from prior years' tax closeout.

*Net profit (loss) for the year.* In view of the foregoing, our net profit for the year amounted to US$26.3 million in 2015 as compared to US$18.4 million in 2014.

**Liquidity and Capital Resources**

As our liquidity and capital requirements are affected by many factors, some of which are beyond our control, our funding requirements may change over time. If we require additional funds to support our working capital or capital requirements, we may seek to raise such additional funds through public or private financing or other sources. We maintain our cash and cash equivalents in accounts with certain financial institutions and other temporary cash investments. We also maintain revolving credit facilities for working capital purposes with banks in Indonesia and Singapore with total aggregate principal amount of approximately US$614 million, including a revolving loan facility of US$85 million, comprising both secured and unsecured facilities.

The table below sets forth our cash flows for the time periods indicated.

| | For the year ended 31 December | | | For the three months ended 31 March | |
|---|---|---|---|---|---|
| | 2014 | 2015 | 2016 | 2016 | 2017 |
| | | | *(US$ millions)* | | |
| **Selected Cash Flow Statement Data** | | | | | |
| Net cash provided by/(used in) operating activities | 116.2 | 104.7 | 475.9 | 109.8 | 55.0 |
| Net cash provided by/(used in) investing activities | (239.4) | (238.0) | (69.0) | (30.3) | (24.7) |
| Net cash provided by/(used in) financing activities | 89.3 | 22.2 | (205.0) | (35.1) | (51.1) |
| Net increase/(decrease) in cash and cash equivalents | (33.9) | (111.1) | 201.9 | 44.4 | 20.8 |

*Net cash provided by operating activities.* Cash inflow from operating activities includes cash receipts from customers and tax restitution received. Cash outflows from operating activities include cash paid to suppliers, directors and employees and payment of corporate income taxes.

For the three months ended 31 March 2017, we had net cash provided by operating activities of US$55.0 million attributable to cash receipts from customers of US$557.2 million, offset by (i) cash paid to suppliers, directors and employees of US$492.2 million and (ii) payment of corporate income taxes of US$16.5 million.

In 2016, our net cash provided by operating activities increased by 354.5% to US$475.9 million, primarily as a result of significant increase in cash receipts from customers.

In 2015, our net cash provided by operating activities decreased by 9.9% to US$104.7 million, primarily as a result of a decrease in cash receipts from customers, which was largely offset by cash paid to suppliers. The decrease was a result of (i) lower production levels and consequently lower sales volumes, caused by the scheduled TAM and expansion tie-in works which shutdown our naphtha cracker for 85 days and (ii) the decrease in average sales prices of our products following the decrease in prices of crude oil.

In 2014, our net cash provided by operating activities decreased by 24.5% to US$116.2 million, primarily as a result of an increase in cash paid to suppliers due to timing of working capital movements.

*Net cash used in investing activities.* Cash outflows from investing activities include acquisition of property, plant and equipment. Cash inflows from investing activities include proceeds from sale of property, plant and equipment and interest received.

For the three months ended 31 March 2017, we had net cash used in investing activities of US$24.7 million primarily attributable to (i) acquisition of property, plant and equipment of US$15.9 million, and (ii) advance payment for purchase of property, plant and equipment of US$6.0 million.

In 2016, our net cash used in investing activities decreased by 71.0% to US$69.0 million, primarily as a result of the completion of our cracker expansion project in December 2015.

In 2015, our net cash used in investing activities decreased by 0.6% to US$238.0 million, primarily as a result of the investments made in our cracker expansion project and additional investments made in an associate company as a result of sales from non-current asset.

In 2014, our net cash used in investing activities increased by 79.1% to US$239.4 million, and was largely attributable to the investments made in our cracker expansion project.

*Net cash used in financing activities.* Cash outflows from financing activities include payment of long-term and short-term bank loans, payment of interest and financial charges and payment of transaction costs. Cash inflows from financing activities include proceeds from long-term and short-term bank loans and proceeds from bonds payable.

For the three months ended 31 March 2017, our net cash used in financing activities was US$51.4 million, attributable to payment of long-term bank loans of US$42.8 million and interest and financial charges paid of US$8.0 million.

In 2016, our net cash used in financing activities was US$205.0 million, primarily as a result of net payments we made for long-term bank loans and short-term bank loans of US$123.1 million, interest and financial charges of US$27.9 million and dividend payments of US$43.7 million.

In 2015, our net cash provided by financing activities decreased by 75.1% to US$22.2 million, primarily as a result of a net drawdown of our term loans for investment activities of US$59.3 million, partly offset by payment of interest and financial charges of US$25.2 million and dividend payments of US$4.9 million.

In 2014, our net cash used in financing activities decreased by 9.2% to US$89.3 million, primarily as a result of a net drawdown of our term loans for investment activities of US$132.7 million, partly offset by payment of interest and financial charges of US$25.9 million and dividend payments of US$4.3 million.

**Indebtedness**

As of 31 March 2017, our material indebtedness consisted of the loans and notes described below. We are in compliance with the terms and conditions of our outstanding indebtedness.

***US$220 million Term Loan***

On 29 September 2012, we obtained a term loan in the aggregate principal amount of US$220 million pursuant to a term loan agreement between (i) the Company as borrower, (ii) PBI, SMI, and AC as guarantors, (iii)

Bangkok Bank Public Company Limited – Jakarta Branch and The Siam Commercial Bank Public Company as arranger and lender, and (iv) Bangkok Bank Public Company Limited as agent ("**Term Loan A**").

The interest rate under Term Loan A is LIBOR plus 4.10% and is payable quarterly. Term Loan A is secured by, among other things, our onshore accounts, insurance claims, shares and fixed and movable assets. Under Term Loan A, we are bound by certain restrictions on our business activities, financing activities and corporate actions, such as pledging assets, disposal of assets, mergers or consolidation, changes in business activities and obtaining loans. In addition, in the event that we amend our articles of association, we must notify the agent at least five working days prior to such amendment. We notified Bangkok Bank Public Limited regarding the amendment of our articles of association in connection with the Rights Issue on 9 May 2017.

Term Loan A includes certain maintenance covenants, including for the interest service coverage ratio not to exceed 1.75 to 1.0, total debt to capitalisation ratio not to exceed 50%, dividends being limited to the amount of our net income and a requirement to maintain a certain balance in our debt service reserve and debt service accrual accounts.

We utilised Term Loan A to prepay (i) the Company's debt to AC, where AC lent its bonds issuance proceeds to the Company, and (ii) part of the US$150 million term loan facility agreement dated 21 November 2011.

As of 31 March 2017, the total aggregate principal amount outstanding under Term Loan A was approximately US$88.6 million. Term Loan A will mature on 29 September 2019, with an 18 months grace period.

***US$94.98 million Term Loan***

On 7 October 2015, we obtained a term loan in the aggregate principal amount of US$94.98 million pursuant to a term loan agreement between (i) the Company as borrower, (ii) PBI, SMI, and AC as guarantors, (iii) Bangkok Bank Public Company Limited – Jakarta Branch, The Siam Commercial Bank Public Company, PT Bank DBS Indonesia, DBS Bank Ltd. and The Hongkong and Shanghai Banking Corporation Limited – Jakarta Branch as lenders, and (iv) PT Bank DBS Indonesia as agent ("**Term Loan B**").

The interest rate under Term Loan B is LIBOR plus a margin, comprising 4.25% for the first tranche and 4.15% for the second tranche and is payable quarterly. Term Loan B is secured by, among other things, our onshore accounts, insurance claims, shares and fixed and movable assets.

Term Loan B includes certain maintenance covenants, including for the interest service coverage ratio not to exceed 1.75 to 1.0, total debt to capitalisation ratio not to exceed 50%, dividends being limited to the amount of our net income and a requirement to maintain a certain balance in our debt service reserve and debt service accrual accounts. Under Term Loan B, we are bound by certain restrictions on our business activities, financing activities and corporate actions, such as pledging assets, disposal of assets, mergers or consolidation, changes in business activities and obtaining loans. In addition, in the event that we amend our articles of association, we must notify the agent at least five working days prior to such amendment. We notified PT Bank DBS Indonesia regarding the amendment of our articles of association in connection with the Rights Issue on 9 May 2017.

We utilised Term Loan B to prepay all amounts outstanding under the US$150 million facility agreement dated 21 November 2011, as amended and restated by an amendment and restatement agreement dated 3 October 2012.

As of 31 March 2017, the total aggregate principal amount outstanding under Term Loan B was approximately US$64.8 million. Term Loan B will mature on 7 October 2022, with a six month grace period.

***US$199.8 million Term Loan***

On 28 November 2016, we obtained a term loan in the aggregate principal amount of US$199.8 million pursuant to a term loan agreement entered into by and between: (i) the Company as borrower, (ii) PBI, SMI and AC as guarantors, (iii) Bangkok Bank Public Company Limited, Jakarta Branch, The Siam Commercial Bank Public Company Limited, PT Bank DBS Indonesia, DBS Bank Ltd., The Hongkong and Shanghai Banking Corporation Limited - Jakarta Branch, PT Bank ICBC Indonesia and PT Bank BNP Paribas Indonesia as lenders, and (iv) PT Bank DBS Indonesia as agent ("**Term Loan C**").

The interest rate under Term Loan C is LIBOR plus 3.5% and is payable quarterly. Term Loan C is secured by, among other things, our onshore accounts, insurance claims, shares and fixed and movable assets.

Term Loan C includes certain maintenance covenants, including for the interest service coverage ratio not to exceed 1.75 to 1.0, total debt to capitalisation ratio not to exceed 50%, dividends being limited to the amount of our net income and a requirement to maintain a certain balance in our debt service reserve and debt service accrual accounts. Under Term Loan C, we are bound by certain restrictions on our business activities, financing activities and corporate actions, such as pledging assets, disposal of assets, mergers or consolidation, changes in business activities, and obtaining loans. In addition, in the event that we amend our articles of association, we must notify the agent at the latest five working days prior to such amendment. We notified PT Bank DBS Indonesia regarding the amendment of our articles of association in connection with the Rights Issue on 9 May 2017.

We utilised Term Loan C to prepay all amounts outstanding under the US$265 million facility agreement dated 5 December 2013.

As of 31 March 2017, the total aggregate principal amount outstanding under Term Loan C was approximately US$193.8 million. Term Loan C will mature on 28 November 2023, with a six month grace period.

***IDR 500 billion Senior Secured Notes***

On 22 December 2016, we issued a senior secured notes in the aggregate principal amount of IDR500 billion ("**IDR Notes**"). The interest rate under each series of IDR Notes is 10.8% and 11.3%, respectively, and is payable quarterly. IDR Notes is secured by, among other things, our fixed and movable assets.

The IDR Notes include certain maintenance covenants, including that our ratio of consolidated bearing liabilities and equity must not to exceed 1 to 1 and that our ratio of cash flow from operating activities and financial charges must not exceed 1.75 to 1.

We entered into a cross-currency swap and a interest rate swap to fix the interest payment in IDR terms on even interest payment date.

As of 31 March 2017, the total aggregate principal amount outstanding under the IDR Notes was approximately US$37.4 million. The respective series of IDR Notes will mature on 22 December 2019 and 22 December 2021.

***Facility Agreement with Kasikornbank Public Company Limited ("Kasikornbank")***

On 27 June 2016, the Company signed a facility agreement for an uncommitted and unguaranteed facility for working capital in the amount of THB 4,000,000,000 (or equivalent if in another currency) from Kasikornbank. There is no restriction in the facility agreement in relation to the proposed Right Issue. The facility is available until 27 June 2017 and will be automatically extended for a 12 month period.

***Facility Agreement with PT Bank Negara Indonesia (Persero) Tbk ("BNI")***

On 17 March 2008, the Company signed a facility agreement with BNI which was amended most recently on 29 June 2016. The facility has a combined maximum amount of US$15,000,000 and comes with sight letter of credit, usance letter of credit, usance payable at sight and usance payable at usance. The facility is subject to an interest rate that is calculated based on BNI's interest rate, except for the trust receipt, which is subject to a 3 month LIBOR interest rate + 4% margin per annum.

Under the terms of this facility agreement, the Company is required to notify BNI in writing prior to making any investment with a project cost of more than US$10,000,000, obtaining any credit facility from BNI or any other financial institution prior to the full repayment of this facility, and any changes to the Company's management and majority shareholders.

This facility is available until 16 March 2017. As of the date of this announcement, the parties are in the process of extending the facility and are still performing its rights and obligations under this agreement. They remain subject to the provisions as set forth under this agreement until the agreement is renewed.

***Facility Agreement with PT Bank Danamon Indonesia Tbk. ("Danamon")***

On 28 August 2007, the Company obtained a US$75,000,000 omnibus trade finance facility from Danamon pursuant to a facility agreement most recently amended on 19 September 2016. The facility comes with a domestic sight/usance letter of credit, an import sight/usance letter of credit, a usance payable at usance, trust receipt and standby letter of credit.

Under the terms of this facility agreement, the Company is required to notify Danamon prior to, among other things, the dissolution, merger or consolidation of the Company, the sale or assignment of any rights to the Company's assets, the lease or handover of part or all of the Company's assets, the amendment of the Company's articles of association and any changes to the Company's Board of Directors, Board of Commissioners or controlling shareholders.

The Company submitted a written notification to Danamon with regards to the proposed Right Issue on 9 May 2017.

This facility is available until 30 June 2017.

***Facility Agreement with PT Bank DBS Indonesia ("DBSI")***

On 28 October 2009, the Company obtained a US$65,000,000 import financing facility from DBSI pursuant to the facility agreement most recently amended on 23 July 2016. The facility comes with an uncommitted import letter of credit facility, a sight letter of credit, a usance payable at sight or usance payable at usance, valid for a maximum 150 calendar days.

Under the terms of the facility agreement, the Company must obtain written consent from DBSI prior to, among other things, a change of the Company's business activity, an application for bankruptcy or suspension of debt payment, and acting as a guarantor for third party. The Company is also required to notify DBSI in the event of an amendment to its articles of association.

The Company submitted a written notification to DBSI with regards to the proposed Right Issue on 9 May 2017.

This facility is available until 31 March 2017 or until the termination of the letter of credit issuance period, whichever is later. The Company and DBSI have extended the maturity date of this facility until 30 June 2017.

***Facility Agreement with DBS Bank Ltd. ("DBS")***

On 19 November 2010, the Company, SMI and PBI obtained a working capital facility from DBS pursuant to a facility agreement most recently amended on 6 September 2016. The working capital facility comprises (i) Facility A with a limit of US$120,000,000 and (ii) Facility B with a limit of US$60,000,000.

Under the terms of the facility agreement, advances are subject to interest rates of LIBOR + 1.25% margin per annum for Facility A and 1.85% per annum for Facility B. Loans are subject to interest rates of LIBOR + 1.85% margin per annum for Facility A and 2.25% per annum for Facility B.

The terms of this facility agreement limit the Company's ability to, among others, grant collateral, dispose of assets, conduct restructuring activities and amend its constitutional documents.

The Company submitted a written notification to DBS with regards to the proposed Right Issue on 9 May 2017.

Facility A is valid until 14 November 2016 and will be automatically extended for 12 months at a time, while Facility B is valid until 14 November 2019.

***Facility Agreement with the Hongkong and Shanghai Banking Corporation Limited ("HSBC")***

On 30 June 2010, the Company and SMI signed a facility agreement with HSBC, most recently amended on 5 April 2017. The facility comprises (i) an import facility with a limit of US$100,000,000, (ii) an issuance of bank guarantee with limit of US$5,000,000, (iii) a revolving loan facility with a limit of US$25,000,000 and (iv) a treasury facility with a limit of US$5,000,000.

The facility is subject to an interest rate of 8.5% per annum below the best lending rate from HSBC to be charged daily, except for revolving loan facility, which is subject to an interest rate of 6.72% p.a. below term lending rate charged at the daily drawdown.

Under the terms of this agreement, the Company is required to notify HSBC in writing prior to, among others, any guarantee, pledge, mortgage, or granting of any warranty rights to the Company and/or SMI's property, assets or income, any extension of any debt or any other obligation (including a lease obligation or warranty) except for (a) debt incurred based on an agreement and (b) debt of trading incurred in the ordinary course of business, the provision of loans to other third parties (except for its subsidiaries) except for credit provided independently and in the ordinary course of business, and any amendment to its articles of association.

The Company submitted a written notification to HSBC with regards to the proposed Right Issue on 9 May 2017.

This facility is available until April 2018.

***Facility Agreement with PT Bank Central Asia Tbk. ("BCA")***

On December 2004, the Company and SMI obtained a facility of US$50,000,000 pursuant to a facility agreement with BCA, most recently amended in 20 October 2016. The facility is a multi-trade lines facility and comes with sight letter of credit, usance letter of credit, usance payable at sight, usance payable at usance and domestic letter of credit.

Under the terms of this facility agreement, the Company and/or SMI is required to provide written notice to BCA in the event of, among others: (i) changes to the composition of Company and/or SMI's board of directors and board of commissioners, (ii) obtaining new loan/credit loans and/or bind as guarantor in the form and in whatever name and/or encumbered assets of the Company and/or SMI to other parties. The Company and/or SMI is required to obtain written consent from BCA prior to amending its articles of association.

The Company submitted a written notification to BCA with regards to the proposed Right Issue on 3 May 2017 and obtained written approval from BCA on 17 May 2017.

This facility is available until 27 October 2017.

***Facility Agreement with Lembaga Pembiayaan Ekspor Indonesia ("Eximbank")***

On 10 July 2014, the Company obtained a facility of US$35,000,000 pursuant to a facility agreement with Eximbank, most recently amended on 30 June 2016. This facility comes with, among other things, export working capital facility, a bookkeeping facility letter of credit, a domestic letter of credit and usance payable at sight.

Under the terms of this agreement, the Company is required to obtain written consent from Eximbank in the event that the Company, among other things, acts as guarantor or encumbers its assets, or delivers all or part of its rights and/or obligations to third parties.

This facility is available until 10 July 2017.

***Facility Agreement with Deutsche Bank AG, Jakarta ("Deutsche Bank")***

On 25 June 2014, the Company, SMI and PBI signed a facility agreement with Deutsche Bank which was most recently amended on 12 January 2017. The facility has a combined maximum amount of US$55,000,000 and comes with letters of credit, domestic letters of credit as well as invoice financing. The invoice financing facility is subject to an interest rate of LIBOR + 2.5% per annum calculated on a 360-day year basis or at an agreed rate.

The facility is valid until 31 August 2017 and is automatically extended for 12 months from its expiration date unless otherwise notified by Deutsche Bank in writing.

The Company submitted a written notification to Deutsche Bank with regards to the proposed Right Issue on 9 May 2017.

***Facility Agreement with the Siam Commercial Bank Public Limited ("Siam Commercial Bank")***

On 12 November 2014, the Company obtained a revolving credit facility of US$30,000,000 pursuant to a facility agreement with Siam Commercial Bank, most recently amended on 11 November 2016.

Under the terms of the facility agreement, the Company must obtain written consent from Siam Commercial Bank prior to amending its constitutional documents and is also limited in its ability to issue any shares or grant any person any right to call for the issue or allotment of any shares in the capital of the Company or such other group member (including an option or a right of pre-emption or conversion) or enter into any agreement or resolve to do any of the foregoing.

The Company submitted a consent request to Siam Commercial Bank with regards to the proposed Right Issue on 3 May 2017 and received consent on 30 May 2017.

The facility will expire on 11 November 2017.

***Facility Agreement with Bangkok Bank Public Company Limited ("Bangkok Bank")***

On 12 November 2014, the Company entered into a facility agreement with Bangkok Bank for a revolving credit facility with promissory notes with a maximum principal amount of US$30,000,000. The facility is valid for a maximum of 180 calendar days. Interest for the outstanding principal amount is equal to LIBOR + 3.75% per annum.

Under the terms of this agreement, the Company is required to notify Bangkok Bank in writing in the event of, among others, any resolutions pursuant to the Company's general meeting of the shareholders and/or Board of Commissioners meeting and/or Board of Directors meeting which may affect the provisions and requirements as set out in the agreement, any change in the Company's authorized signatory and/or any amendment to the articles of association, Board of Directors or Board of Commissioners, and the occurrence of a negligent event which may be deemed as an event of default.

The Company submitted a written notification to Bangkok Bank with regards to the proposed Right Issue on 9 May 2017.

This facility is available until 12 November 2016.

**Capital Expenditures**

***Historical capital expenditures***

For the three months ended 31 March 2017, we spent US$21.9 million in capital expenditures, including for our debottlenecking and expansion projects and plant improvements.

The table below shows our actual capital expenditures for the periods indicated:

| | For the year ended 31 December | | | For the three months ended 31 March | |
|---|---|---|---|---|---|
| | **2014** | **2015** | **2016** | **2016** | **2017** |
| | | | *(US$ millions)* | | |
| | 186.1 | 124.9 | 22.2 | 16.7 | 7.7 |
| Debottlenecking and expansion | 26.7 | 27.1 | 43.5 | 7.2 | 14.2 |
| Plant improvement and others | | | | | |
| TAM | — | 45.9 | 7.6 | 9.8 | — |
| **Total capital expenditures** | **193.7** | **197.9** | **73.3** | **33.7** | **21.9** |

***Planned capital expenditures***

During 2017, 2018 and 2019, we expect to incur capital expenditures of approximately US$164.8 million, US$352.4 million and US$492.7 million, respectively, as broken down by projects in the table below. These

amounts are subject to change depending on a number of factors, including the results of our feasibility studies and the completion of projects in a timely manner.

| | For the year ended 31 December | | |
|---|---|---|---|
| | 2017 | 2018 | 2019 |
| | *(US$ millions)* | | |
| Butadiene expansion | 18.6 | 22.6 | — |
| Polypropylene debottlenecking project | 11.5 | 1.0 | — |
| Naphtha cracker furnace revamp | — | — | 21.5 |
| New polyethylene plant | 43.0 | 99.0 | 99.0 |
| MTBE and Butene-1 plant | 5.0 | 35.0 | 50.0 |
| Second Petrochemical Complex (initial spend) | 25.0 | 150.0 | 280.0 |
| Others (including TAM) | 61.7 | 44.8 | 42.2 |
| **Total capital expenditures** | **164.8** | **352.4** | **492.7** |

Notes:
(1) We have three committed projects, namely the butadiene expansion project, our polypropylene debottlenecking project and our naphtha cracker furnace revamp. We have two projects in the pipeline, namely the construction of a new polyethylene plant and the construction of a new MTBE and Butene-1 plant, and a second petrochemical complex in the feasibility stage.

***Trade receivables and credit assessment***

The average credit period on our sales of goods is between seven to 30 days. Export sales are usually supported by letter of credit. No interest is charged for receivables not yet due. Allowance for impairment losses is recognised against trade receivables, based on the estimated irrecoverable amounts determined by reference to past default experience of the counterparty and an analysis of the counterparty's current financial position.

Before accepting a new customer, we assess whether the potential customer meets our required conditions. Before approving any credit sales, we check the remaining credit limit for the customer. Customers are required to settle their outstanding receivables before the new credit sales are approved. Approval by the senior management is required for credit sales above the credit limit.

As of 31 March 2017, our net trade accounts receivable was US$208.5 million, out of which US$207.3 million was the trade receivables not yet due, which accounted for approximately 99.4% of our net trade accounts receivable. Trade receivables past due between one and 30 days was US$1.3 million, which accounted for approximately 0.6% of our net trade accounts receivable. Trade receivables past due between 31 days and 60 days was nil.

***Contractual Obligations***

The table below summarises our payment obligations (in principal amounts) and commitments as of 31 March 2017.

| | Payment Due by Period End | | | | | |
|---|---|---|---|---|---|---|
| | Total | Less than 1 month | 1 months to 3 months | 3 months to 1 year | 1 – 5 years | 5 years and longer |
| | | | *(US$ millions)* | | | |
| Non-interest bearing | | | | | | |
| Trade accounts payable | | | | | | |
| Related party | 25,293 | 25,293 | — | — | — | — |
| Third parties | 318,812 | 318,812 | — | — | — | — |
| Other accounts payable | 157 | 157 | — | — | — | — |
| Accrued expenses | 3,880 | 3,880 | — | — | — | — |
| Variable interest rate instrument | 348,097 | 1,240 | 9,340 | 41,251 | 195,477 | 100,789 |
| Bank loans | 118,360 | 470 | 11,426 | 17,165 | 76,845 | 12,454 |
| Fixed interest rate instruments | 44,436 | — | 482 | 1,446 | 42,508 | — |

| | Payment Due by Period End | | | | | |
|---|---|---|---|---|---|---|
| | Total | Less than 1 month | 1 months to 3 months | 3 months to 1 year | 1 – 5 years | 5 years and longer |
| | | | *(US$ millions)* | | | |
| **Total** | **859,035** | **349,852** | **21,248** | **59,862** | **314,830** | **113,243** |

In addition, as of 31 March 2017 we were party to several supply contracts that contained purchase obligations with variable pricing terms.

**Contingent Liabilities**

As of the date of this announcement, we did not have any contingent liabilities.

**Off-Balance Sheet Items**

As of the date of this announcement, we did not have any off-balance sheet arrangements.

**Risk Management**

The following discussion summarises our exposure to various risks and our policies to address these risks. The following discussion contains forward-looking statements that are subject to risks, uncertainties and assumptions about us. These statements are based upon current expectations and projections about future events. There are important factors that could cause our actual results and performance to differ materially from such forward-looking statements.

***Foreign currency risks and interest rate risks***

Our underlying revenues, and the majority of our costs and borrowings are denominated in U.S. dollars, which provides a natural economic hedge. In addition, our functional reporting currency is in U.S. dollars. However, operating in Indonesia, there are instances where we are affected by the fluctuations of the Rupiah against the U.S. dollar pertaining mainly to taxes, salaries and purchase of local goods and services which are denominated in Rupiah. We maintain sufficient cash balance denominated in Indonesian Rupiah to cover the expenses denominated in Indonesian Rupiah.

We are also exposed to interest rate risk because we borrow certain funds largely in U.S. dollars at floating interest rates.

We have entered into a range of derivative financial instruments to manage our exposure to foreign currency risk and interest rate risks, such as the following:

- interest rate swaps to hedge against the rising interest rates;
- forward foreign exchange contracts to mitigate exposures to exchange rate fluctuations; and
- cross-currency swaps to mitigate the risk of rising interest rate and U.S.-dollar exchange on the bonds payable.

As of 31 March 2017, we had entered into interest rate swaps in respect of three outstanding term loan facilities with aggregate principal amounts of US$57.2 million, US$39.4 million and US$30.0 million, respectively. In addition, we had entered into cross-currency swaps and interest rate swaps in respect of outstanding guaranteed secured notes in two series, with an aggregate principal amount of IDR500 billion (US$37.5 million).

***Commodity price risks***

Our raw materials and products are commodities whose prices fluctuate as market supply and demand fundamentals vary. As such, our product margins and profitability tend to reflect changes in the business cycle. In particular, our revenue is highly dependent on the naphtha petrochemical process, which in turn is highly influenced by global petrochemical prices, which tend to be cyclical and subject to significant fluctuations.

To mitigate this volatility, our business strategy is to achieve a higher degree of integration in order to maintain a diverse product portfolio to benefit from different product spread cycles. In addition, we are able to benefit from our operational flexibility, enabling us to adjust production outputs for each respective product to take advantage of different product spreads at times to maximise our profitability and commercial flexibility in feedstock procurement and sales contracts.

***Credit risks***

Our credit risk is primarily attributed to our cash in banks and trade accounts receivable. We place our bank balances with creditworthy financial institutions. Trade accounts receivable are entered with creditworthy third parties and related parties. Our exposure and counterparties are continuously monitored and the aggregate value of transactions concluded is spread among approved counterparties. Credit exposure is controlled by counterparty limits that are reviewed and approved by our management.

***Liquidity risks***

We manage liquidity risk by maintaining adequate reserves, banking facilities and reserve borrowing facilities, by continuously monitoring forecast and actual cash flows, and by matching the maturity profiles of our financial assets and liabilities.

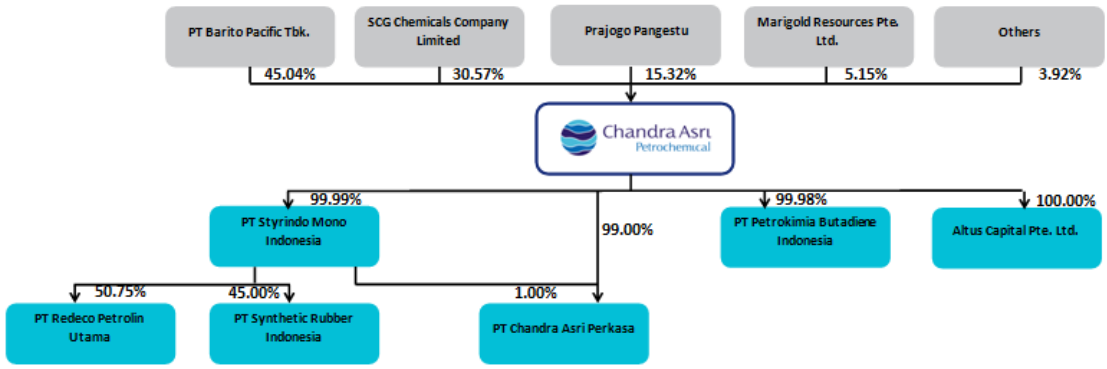
## BUSINESS

We are the largest integrated petrochemical producer in Indonesia and operate the country's only naphtha cracker, styrene monomer and butadiene plants. We are also the country's largest polypropylene producer and leading producer of polyethylene.

We operate an integrated petrochemical complex located in Banten Province of Indonesia, approximately 120 km from Jakarta. Our integrated petrochemical complex comprises (i) our main petrochemical complex in Ciwandan, Cilegon, located 120 km from Jakarta, which houses one naphtha cracker, two polyethylene plants, three polypropylene trains and one butadiene plant that produce olefins, polyolefins and butadiene and its by-products and (ii) a styrene monomer complex approximately 40 km from our main petrochemical complex, in Bojonegara, Serang, and located 110 km from Jakarta, which houses two styrene monomer plants that produce styrene monomer and its by-products. Our styrene monomer plants are directly connected by pipelines to our main petrochemical complex in Cilegon. The strategic location of our integrated petrochemical complex provides us with convenient access to our key ethylene and propylene customers, which are directly connected to our production facilities in Cilegon by pipelines. Our petrochemical complex has integrated support facilities including pipelines, power generators, boilers, water treatment plants, storage tanks and jetty facilities.

Our Company was a surviving entity from a merger between PT Chandra Asri ("**CA**") and PT Tri Polyta Indonesia Tbk ("**TPI**"), which took effect on 1 January 2011. CA was incorporated in 1989 and its naphtha cracker plant commenced operations in 1995. TPI was incorporated in 1984 and its polypropylene plant commenced operations in 1992. As of 31 May 2017, our principal shareholders were Barito Pacific and SCG Chemicals. Barito Pacific directly and indirectly, through its wholly-owned subsidiary Marigold, owned 50.19% of our outstanding shares, SCG Chemicals owned 30.57%, of our outstanding shares and Prajogo Pangestu owned 15.32% of our outstanding shares. Prajogo Pangestu also owned 61.91% of the outstanding shares of Barito Pacific as of 31 May 2017.

The chart below sets forth our corporate structure:




Notes:
(1) We established a joint venture with Michelin to set up SRI in 2013. SRI focuses on manufacturing ingredients for environmentally-friendly tires. We hold a 45.00% ownership and Michelin holds the remaining 55.00%.

We have the following subsidiaries and associate companies:

| Name of Companies | Ownership (%) | Line of Business | Operational Status | Domicile |
|---|---|---|---|---|
| PT Styrindo Mono Indonesia ("**SMI**") | 99.99% | Styrene Monomer & Ethyl Benzene | Operating | Jakarta |
| PT Redeco Petrolin Utama ("**RPU**") | 50.75% | Tank Lease and Jetty Management Service | Operating | Jakarta |
| PT Synthetic Rubber Indonesia ("**SRI**") | 45.00% | Synthetic Rubber | Development | Jakarta |
| Altus Capital Pte. Ltd. | 100.00% | Finance | Operating | Singapore |

| Name of Companies | Ownership (%) | Line of Business | Operational Status | Domicile |
|---|---|---|---|---|
| ("**AC**") | | | | |
| PT Petrokimia Butadiene Indonesia ("**PBI**") | 99.98% | Petrochemical | Operating | Jakarta |
| PT Chandra Asri Perkasa ("**CAPE**") | 99.00% | Olefin | Development | Jakarta |

During the years ended 31 December 2014, 2015 and 2016 and the three months ended 31 March 2017, we generated net revenues of US$2.5 billion, US$1.4 billion, US$1.9 billion and US$632.7 million, respectively. During the years ended 31 December 2014, 2015 and 2016 and the three months ended 31 March 2017, our EBITDA was US$134.5 million, US$154.8 million, US$509.5 million and US$172.1 million, respectively and our EBITDA margin was 5.5%, 11.2%, 26.4% and 27.8%, respectively. As of the date of this announcement, our long-term corporate credit was rated "B1" by Moody's and "B+" by S&P and "idA+" by PEFINDO.

**Products**

We produce the following products:

- olefins, comprising ethylene and propylene, and its by-products such as pygas and mixed $C_4$;
- polyolefins, comprising polyethylene and polypropylene;
- styrene monomer and its by-products, such as ethyl benzene, toluene and benzene toluene mixture; and
- butadiene and its by-products, such as raffinate.

Our products are fundamental to the production of a diverse range of consumer and industrial products, including packaging, containers, construction materials and automotive parts. During the year ended 31 December 2016, we produced 1,673 KT of olefins and its by-products, 757 KT of polyolefins, 278 KT of styrene monomer and its by-products and 88 KT of butadiene and its by-products. For the same period, our sales of olefin and by-products, polyolefin, styrene monomer and its by-products and butadiene and its by-products contributed to 31.6%, 45.8%, 15.0%, and 7.2% of our net revenue, respectively.

Our polypropylene impact copolymer resins are used as raw materials for the manufacturing of car and motorcycle components. We are the only producer of polypropylene impact copolymer resins in Indonesia and are the first company to supply vehicle-oriented resins to the domestic automotive component manufacturing industry in accordance with international standards.

We sell our products to customers in both the domestic and regional markets. We are the only domestic producer of ethylene, styrene monomer and butadiene, one of only two domestic producers of propylene and polyethylene and the largest polypropylene producer in Indonesia. According to Nexant, we accounted for approximately 58% of the total market share of ethylene in 2016 in Indonesia. In addition, we had a market share in Indonesia of approximately 24% for polyethylene, 29% for polypropylene and 100% for styrene monomer in 2016.

The table below sets forth the nameplate capacity, production volumes, and proportion of such volumes to our total production volume, for our products for the time periods indicated:

| | | For the year ended 31 December | | | | | | For the three months ended 31 March | |
|---|---|---|---|---|---|---|---|---|---|
| | Nameplate Capacity[(1)] | 2014 | | 2015 | | 2016 | | 2017 | |
| | *(KT/A)* | *KT* | *%* | *KT* | *%* | *KT* | *%* | *KT* | *%* |
| Olefins and by-products | | | | | | | | | |
| Ethylene | 860 | 561 | 22.9 | 339 | 19.2 | 771 | 26.4 | 214 | 28.3 |
| Propylene | 470 | 296 | 12.1 | 182 | 10.3 | 416 | 14.2 | 114 | 15.1 |
| Pygas | 400 | 181 | 7.4 | 118 | 6.7 | 237 | 8.1 | 62 | 8.2 |

| | Nameplate Capacity[1] | For the year ended 31 December | | | | | | For the three months ended 31 March | |
|---|---|---|---|---|---|---|---|---|---|
| | | 2014 | | 2015 | | 2016 | | 2017 | |
| | *(KT/A)* | *KT* | *%* | *KT* | *%* | *KT* | *%* | *KT* | *%* |
| Mixed $C_4$ | 315 | 185 | 7.6 | 110 | 6.2 | 249 | 8.5 | 69 | 9.1 |
| Polyolefins | | | | | | | | | |
| Polyethylene | 336 | 311 | 12.7 | 224 | 12.7 | 329 | 11.3 | 62 | 8.2 |
| Polypropylene | 480 | 477 | 19.5 | 444 | 25.2 | 428 | 14.7 | 120 | 15.9 |
| Styrene monomer and by-products | 340 | 255 | 10.4 | 240 | 13.6 | 282 | 9.7 | 85 | 11.3 |
| Butadiene and by-products | 100 | 179 | 7.3 | 108 | 6.1 | 208 | 7.1 | 29 | 3.8 |

(1) As of 31 March 2017

***Olefins and by-products***

The key products produced by our naphtha cracker are ethylene and propylene, also known as olefins. During the course of our olefin production, our naphtha cracker creates by-products, including pygas and mixed $C_4$.

We are connected via pipelines to all of our ethylene and propylene customers. All of our domestic ethylene and propylene sales during the years ended 31 December 2014, 2015, 2016 and the three months ended 31 March 2017, respectively, were delivered by pipeline. Our supply agreements with our key customers are renewable on an annual basis.

For the years ended 31 December 2014, 2015, 2016 and the three months ended 31 March 2017, we sold 448 KT, 221 KT, 804 KT and 214 KT of olefins and by-products, respectively. For the years ended 31 December 2014, 2015, 2016 and the three months ended 31 March 2017, 59.1%, 48.9%, 58.1% and 57.9%, respectively, of our olefins and olefin by-products sales was derived from sales to customers in Indonesia and the remainder was derived from export sales.

*Ethylene*

We consume most of our production of ethylene in our two polyethylene plants and a smaller percentage of our ethylene in our styrene monomer plants. In the event of a shutdown of our naphtha cracker and a resulting shortfall in our ethylene production, we have the capability to continue operation of our polyethylene plants through the use of imported ethylene.

The balance of our ethylene production is sold primarily to domestic industrial customers. At times, we also export ethylene products to countries including Singapore, Japan, Korea and Thailand. We have supply agreements for ethylene with key customers, including mostly domestic customers. Our supply agreements with these key customers are renewable on an annual basis. For the years ended 31 December 2014, 2015, 2016 and the three months ended 31 March 2017, we sold approximately 83.3%, 63.7%, 73.5% and 70.4% of our ethylene sales pursuant to supply agreements with these key domestic customers. The supply agreements stipulate a pricing formula based on cost plus spot price. Our supply agreements with our key customers are renewable on an annual basis.

For the years ended 31 December 2014, 2015, 2016 and the three months ended 31 March 2017, we sold 190 KT, 82 KT, 381 KT and 125 KT of ethylene, respectively.

*Propylene*

We generally use all of our propylene production as feedstock for our own production of polypropylene and may occasionally sell propylene to domestic industrial customers on an opportunistic basis. However, our propylene production is not sufficient for our polypropylene production and we typically import propylene to use as feedstock. Propylene is delivered from our propylene plants to our polypropylene trains via pipelines. In the event of a shutdown of our propylene plant, and a resulting shortfall in our propylene production, we have the capability to continue operation of the polypropylene trains through the use of imported propylene.

Our supply agreements with our key customers are renewable on an annual basis. For the years ended 31 December 2014, 2015, 2016 and the three months ended 31 March 2017, we sold 32KT, 32KT, 153KT and 14KT of propylene, respectively.

*Pygas*

We sell the pygas that we produce primarily to SCG Chemicals pursuant to a supply agreement renewable annually and sell the remainder to traders and end-users. For the years ended 31 December 2014, 2015, 2016 and the three months ended 31 March 2017, we sold approximately 81.2%, 93.8%, 65.9% and 95.7% of our pygas sales to SCG. At times, we also export pygas to other countries including Korea, Singapore, Japan and Malaysia. Sales of pygas are generally made on a monthly basis. Prices are benchmarked against the relevant global benchmark, which are quoted in U.S. dollars and are generally adjusted on a monthly basis. Our supply agreements with our key customers are renewable on an annual basis.

For the years ended 31 December 2014, 2015, 2016 and the three months ended 31 March 2017, we sold 198 KT, 107 KT, 236 KT and 70 KT of pygas, respectively.

*Mixed $C_4$*

We use substantially all of our mixed $C_4$ production as feedstock for our production of butadiene and sell some of the mixed $C_4$ that we produce to customers in Thailand, Japan and Korea pursuant to supply agreements and also spot sales. Our supply agreements with our key customers are renewable on an annual basis and stipulate a pricing formula linked to butadiene prices and MOPJ (CFR Japan naphtha quoted in Platts) plus alpha or premium. Our supply agreements with our key customers are renewable on an annual basis.

We did not sell any mixed $C_4$ for the years ended 31 December 2014 and 2015 and sold 34 KT and 5 KT of mixed $C_4$ for the years ended 31 December 2016 and the three months ended 31 March 2017, respectively.

***Polyolefins***

Our polyolefin products consist of polyethylene and polypropylene. For the years ended 31 December 2014, 2015, 2016 and the three months ended 31 March 2017, we sold 785 KT, 676 KT, 743 KT and 191 KT of polyolefins, respectively.

We sell substantially all of our polyethylene domestically through direct sales and through local distributors. Our supply agreements with our key customers are renewable on an annual basis. In the years ended 31 December 2014, 2015, 2016 and the three months ended 31 March 2017, approximately 95.1%, 98.7%, 90.9% and 97.8%, respectively, of our polyethylene sales were sold in Indonesia. We price polyethylene with regard to the CFR SEA polyethylene prices published by ICIS plus a premium. For the years ended 31 December 2014, 2015, 2016 and the three months ended 31 March 2017, we sold 314 KT, 227 KT, 316 KT and 77 KT of polyethylene, respectively, under various grades.

*Polypropylene*

Our polypropylene plant produces homopolymers, random copolymers and impact copolymers and we are the only producer of impact copolymers in Indonesia. We produce a wide variety of polypropylene products, enabling us to reach out to a large variety of customers, including both consumer and industrial segments, resulting in both diversification in products, clientele and polypropylene grades.

We currently sell substantially all of our polypropylene products within Indonesia due to robust domestic demand in Indonesia, which continues to be a net importer of polypropylene. Our supply agreements with our key customers are renewable on an annual basis. For the years ended 31 December 2014, 2015, 2016 and the three months ended 31 March 2017, we sold 100%, 98.3%, 99.7% and 100.0% respectively, of our polypropylene sales to domestic customers. Pricing is based on CFR SEA polypropylene prices published by ICIS plus a premium. We engage third party transporters to deliver all of our domestic sales volume. We tender and agree on trip rate charges with some price adjustments mechanism with the transporters every three years. Our supply agreements with our key customers are renewable on an annual basis.

For the years ended 31 December 2014, 2015, 2016 and the three months ended 31 March 2017, we sold 471 KT, 449 KT, 427 KT and 114 KT of polypropylene, respectively, under various grades.

***Styrene monomer and by-products***

We sell styrene monomer in both the domestic and export markets with our major customers being domestic end-users. We sell styrene monomer by-products in the domestic market. For the year ended 31 December 2014, 2015, 2016 and the three months ended 31 March 2017, we sold 65.3%, 74.2%, 68.8% and 56.8%, respectively, of styrene monomer and its by-products sales to domestic customers. Domestic sales are made mainly through contract supply agreements lasting for periods of one year. Pricing is based on the average of the mean for CFR SEA and CFR China spot prices published by ICIS LOR, plus a premium, for the whole month of delivery. Delivery is contracted to PT Richland Logistics Indonesia ("**RLI**").

For our export business, we use a combination of contract and spot transactions. Our export customers include customers located in Thailand, Singapore, Japan, Hong Kong and China. For contract sales, pricing is based on the average of the mean for CFR China spot prices published by ICIS LOR and Platts for the whole month of delivery. For spot sales, pricing is determined through negotiations with the customers. Delivery is arranged by us for certain of our customers, while others are arranged by the buyers. Our supply agreements with our key customers are renewable on an annual basis.

For the years ended 31 December 2014, 2015, 2016 and the three months ended 31 March 2017, we sold 262 KT, 235 KT, 282 KT and 82 KT of styrene monomer and by-products, respectively.

***Butadiene and by-products***

We sell butadiene in both the domestic and export markets and sell butadiene by-products in the export market. We export butadiene to customers located in Malaysia, China and Korea. For the year ended 31 December 2014, 2015, 2016 and the three months ended 31 March 2017, we sold 19.4%, 18.3%, 19.8% and 13.6%, respectively, of our butadiene and butadiene by-products sales to domestic customers and the remaining to export customers. We use a combination of contract and spot transactions, with pricing based on formula prices based on relevant global benchmark of ICIS CFR NEA and ICIS CFR SEA. Our supply agreements with our key customers are renewable on an annual basis.

For the years ended 31 December 2014, 2015, 2016 and the three months ended 31 March 2017, we sold 186 KT, 105 KT, 202 KT and 68 KT of butadiene and by-products, respectively.

**Feedstock and Raw Materials**

The primary feedstock used in our petrochemical production processes are (i) naphtha, used as feedstock in our naphtha cracker; (ii) ethylene, used as feedstock in our two polyethylene plants and our two styrene monomer plants; (iii) propylene, used as feedstock in our three polypropylene trains, (iv) benzene, used as feedstock in our two styrene monomer plants and (v) $C_4$, used as feedstock in our butadiene plant. We can also use LPG as feedstock for our naphtha cracker for up to 25% of our feedstock requirements, which provides us with the ability to diversify our feedstock supply and reduce our exposure to fluctuations in naphtha prices. We intend to only use LPG as a feedstock at such times when its price makes it a more competitive source of feedstock than naphtha. Since LPG is used extensively as a heating fuel, demand and price for LPG tends to fluctuate and is seasonal as demand increases during the winter months. We regularly review our supplier portfolio to ensure that we are able to secure supply of our principal raw materials at competitive prices. As such, we try to avoid dependence on any single supplier.

Under our accounting treatment, only naphtha and benzene are designated as "raw materials". Since we also produce ethylene, propylene and $C_4$, we designate them as "finished goods".

The table below shows a breakdown of the raw materials consumed for the time periods indicated:

| | For the year ended 31 December | | | For the three months ended 31 March | |
|---|---|---|---|---|---|
| | 2014 | 2015 | 2016 | 2016 | 2017 |
| | | | *Volume (KT)* | | |
| Naphtha | 1,559 | 974 | 2,121 | 409 | 586 |
| Benzene | 197 | 182 | 219 | 48 | 66 |
| Total | 1,756 | 1,156 | 2.339 | 457 | 651 |

***Naphtha***

Naphtha is our principal raw material. To achieve full production capacity, our naphtha cracker will consume approximately 2,450 KT/A of naphtha.

We externally source 100% of the naphtha, condensate and LPG that we use as feedstock in our naphtha cracker. As condensate undergoes a cracking process similar to naphtha, we use condensate as an interchangeable alternative feedstock source to naphtha. During the year ended 31 December 2016 and the three months ended 31 March 2017, we consumed 2,121 KT and 586 KT of naphtha as feedstock. We have not used LPG as feedstock in our naphtha cracker for the last three years and the three months ended 31 March 2017.

We import naphtha using a jetty adjacent to our main petrochemical complex. Our jetty can discharge cargos of up to 80,000 DWT. This provides us with significant business advantages in the form of lower freight rates and more flexible shipping schedules. Our naphtha imports may be on a FOB or CFR basis. Delivery from the jetty to the on-site storage facility is via pipeline. Our naphtha storage facility consists of five floating roof storage tanks, four with a working capacity of 46,000 kilo litres and one with a working capacity of 95,000 kilo litres, or approximately 27 days of supply. Our naphtha storage facility is connected to our main petrochemical complex by pipelines.

Our supply of naphtha is provided through a combination of naphtha purchase agreements and purchases on the spot market. We currently purchase our naphtha from local and international sources, mostly through naphtha purchase agreements with periods that range from six months to one year typically renewable upon agreement of both parties. For the years ended 31 December 2014, 2015, 2016 and the three months ended 31 March 2017, we purchased 69.7%, 69.6%, 76.1% and 57.2%, respectively, of our naphtha pursuant to naphtha purchase agreements with major oil trading companies and the remaining requirements on the spot market. For most contract sales, pricing is based on the average of the mean of Platts Japan for five consecutive days. Pricing can also be determined by Mean of Platts Arab Gulf or Mean of Platts Singapore. Pricing for our spot market purchases is determined through negotiations and is typically on a CFR basis.

The table below sets forth our naphtha suppliers and the naphtha we purchased from them for the time periods indicated.

| **Supplier Name** | **For the year ended 31 December 2016** | |
|---|---|---|
| | ***US$ '000*** | ***(%)*** |
| Vitol Asia Pte Ltd | 304,163.0 | 35.6 |
| Marubeni Petroleum Co Ltd. | 237,454.5 | 27.8 |
| SCG Chemicals Co. Ltd... | 81,821.0 | 9.6 |
| Chevron U.S.A. Inc. | 78,419.7 | 9.2 |
| Shell International Eastern Trading | 69,445.6 | 8.1 |
| Kuwait Petroleum Corporation | 31,640.2 | 3.7 |
| Shell MDS (Malaysia) Sendirian | 26,243.5 | 3.1 |
| Konsorsium PT. Titis Sampurna | 22,003.2 | 2.6 |
| PT Surya Mandala Sakti | 3,180.1 | 0.4 |
| PT Sadikun Chemical Indonesia | 495.8 | 0.1 |
| **Total** | **854,866.6** | **100.0** |

| **Supplier Name** | **For the three months ended 31 March 2017** | |
|---|---|---|
| | ***US$ '000*** | ***(%)*** |
| Vitol Asia Pte Ltd | 103,326.7 | 35.8 |
| Total Trading Asia Pte. Ltd. | 53,098.4 | 18.4 |
| Marubeni Petroleum Co. Ltd. | 42,039.2 | 14.6 |
| Chevron U.S.A. Inc. | 39,564.2 | 13.7 |
| Shell International Eastern Trading | 28,655.9 | 9.9 |
| Konsorsium PT. Titis Sampurna | 10,701.1 | 3.7 |
| Shell MDS (Malaysia) Sendirian | 9,546.5 | 3.3 |
| PT Surya Mandala Sakti | 1,955.3 | 0.7 |
| **Total** | **288,887.2** | **100.0** |

***Benzene***

Benzene, the raw material used in our styrene monomer plants, constitutes the principal raw material in the production of styrene monomer. We purchase all of the benzene that we consume from third parties, and obtain a significant amount from SCG Chemicals. During the years ended 31 December 2014, 2015, 2016 and the three months ended 31 March 2017, we consumed 197 KT, 182 KT, 219 KT and 66 KT, respectively, of benzene, out of which we purchased 96 KT, 52 KT, 90 KT and 69 KT, respectively, from SCG Chemicals. We source the remainder of the benzene from other third party suppliers.

***Other raw materials, consumable chemicals and supplies***

Other raw materials, chemicals and supplies consumed in our production operations include nitrogen, hydrogen, water, water treatment chemicals, butene-1, hexane, polyethylene film for bagging and high activity special catalysts and additives for the polyethylene and polypropylene production process. In addition, as is described below under *"— Support Facilities — Power Utilities,"* our production plants also require the use of significant quantities of electricity.

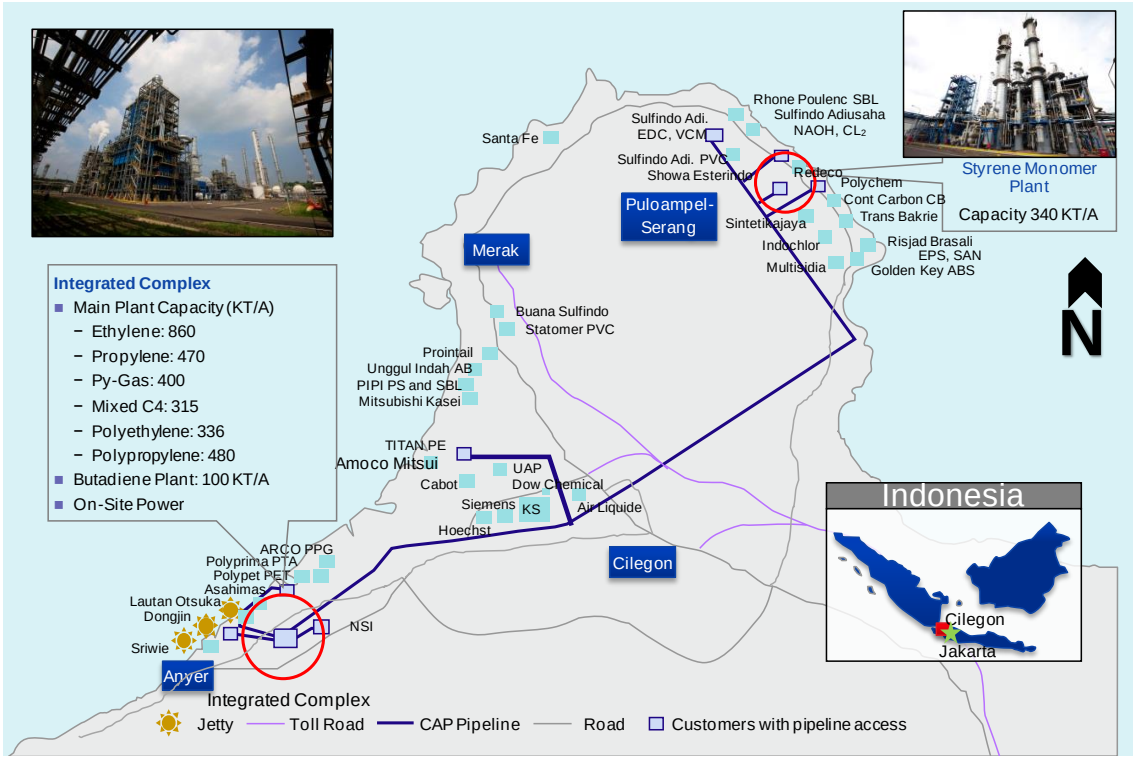
**Production Plants and Manufacturing Processes**

We operate an integrated petrochemical complex located in Banten Province of Indonesia, which comprises our main petrochemical complex in Ciwandan, Cilegon, which houses one naphtha cracker, two polyethylene plants, three polypropylene trains and one butadiene plant to produce olefins, polyolefins and butadiene and its by-products and (ii) a styrene monomer complex approximately 40 km from the main petrochemical complex, in Bojonegara, Serang, which houses two styrene monomer plants to produce styrene monomer and its by-products. Our petrochemical complex in Ciwandan, Cilegon is approximately 123 km west of Jakarta on a site of approximately 135 hectares. Our styrene monomer plants are located approximately 40 km away from our main petrochemical complex on a site of approximately 14 hectares. Our styrene monomer plants are directly connected to our main petrochemical complex in Cilegon by pipelines. We have obtained the right to construct and operate our pipelines on land owned by third parties for specific periods of time, typically for periods of five to 20 years, subject to renewal. We expect to renew these certificates upon their expiration.

Our production facilities are strategically located close to our principal customers for ethylene, which is costly to transport. We deliver ethylene and propylene through our pipelines to customers located in the region and transport all other products for domestic sale by trucks and containers managed by RLI. RLI also manages our warehouse and the logistics for our polyethylene and polypropylene products under an arrangement that expires in February 2017. The parties are in the process of renewing this agreement. The parties to this agreement continue to perform their rights and obligations and remain subject to its provisions until its renewal. All of our export sales are shipped from our jetties.

Our plants benefit from a significant degree of operational integration. The integrated nature of our ethylene, polyethylene, polypropylene, styrene monomer and butadiene production enables us to take advantage of operational savings and synergies and provides us with the flexibility to respond to changes in the relative prices of our key products. In addition, our plants are supported by an infrastructure which includes storage tanks and warehouses, power utilities, pipelines, jetties and transport facilities, a waste water treatment facility, cooling water and seawater systems, boiler facility, air systems, laboratories and process control rooms.

The map below shows the location of our production facilities in Banten Province, Indonesia.

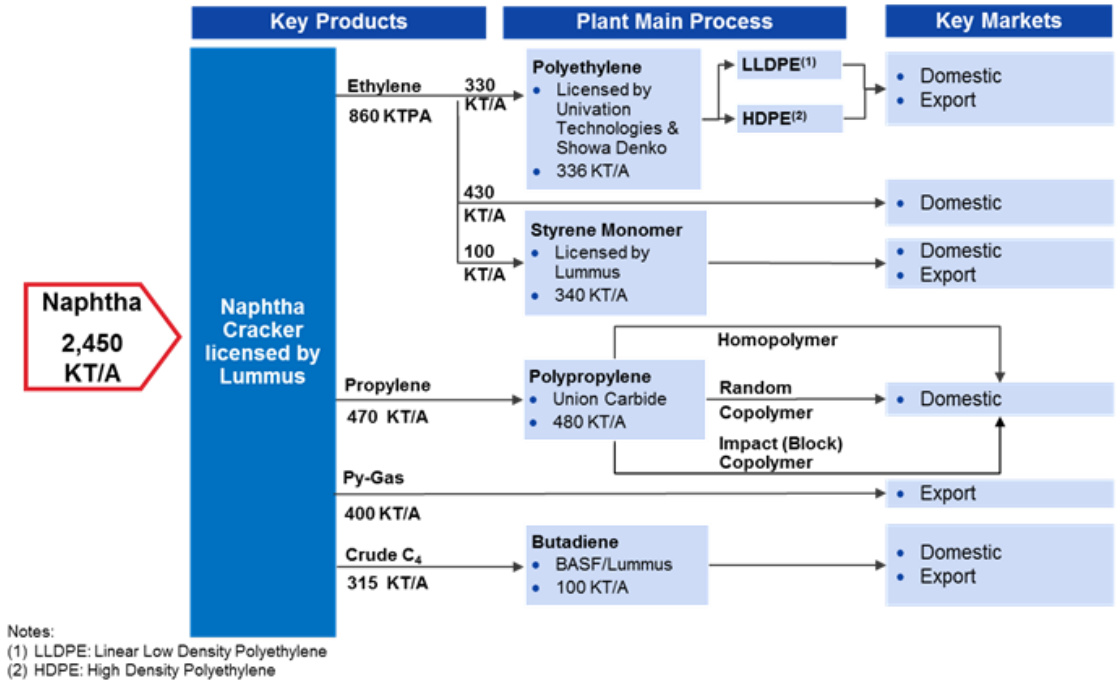



***Naphtha cracker***

We operate a modern naphtha cracker, using technology licensed from Chicago Bridge & Iron Company N.V. ("**CB&I**") with nameplate capacity of 860 KT/A. Our naphtha cracker is the only naphtha cracker in Indonesia and is also able to crack LPG and other feedstock. Our naphtha cracker commenced operations in April 1995. In September 1995, our polyethylene plants became fully integrated with our naphtha cracker allowing our two polyethylene production trains to consume ethylene produced by our naphtha cracker as feedstock. Based on our naphtha cracker's current capacity, our naphtha cracker will consume approximately 2,450 KT/A of naphtha to achieve full production capacity.

We commenced a cracker expansion project in September 2013, which we completed in December 2015. The project resulted in a 43% nameplate capacity increase for our products. As of 31 March 2017, our naphtha cracker is able to produce 860 KT/A of ethylene (from 600 KT/A), 470 KT/A of propylene (from 320 KT/A), 400 KT/A of pygas (from 280 KT/A) and 315 KT/A of mixed $C_4$ (from 220 KT/A). We are also planning to conduct a feasibility study to construct and operate a second petrochemical complex next to our existing main petrochemical complex in Cilegon.

The following chart illustrates the production process and key markets for olefins and by-products used in our naphtha cracker as of 31 March 2017.




***Polyethylene plant***

At our polyethylene plants, we operate an integrated production system, which allows us to improve our feedstock yields and lower our unit cost of production. In addition to utilising the ethylene we produce as feedstock for the production of polyethylene, our plants are supported by infrastructure which includes storage tanks and warehouses, power utilities, process and utility pipelines, jetties and transport facilities, a water treatment plant, cooling water and seawater systems, air systems, a nitrogen system, laboratories and process control rooms. Our two polyethylene plants are situated adjacent to our naphtha cracker. Each plant has its own processing license from Univation Technologies LLC ("**Univation Technologies**") and Showa Denko, respectively.

Our first polyethylene plant, which commenced production in April 1995, has a nameplate capacity of 200 KT/A. Because it is a swing plant, this polyethylene plant allows us to produce both LLDPE and HDPE, allowing us the flexibility to optimise the product mix between these two products with the objective of enhancing our margins. The train uses gas phase technology with a licence from Univation Technologies.

Our second polyethylene plant commenced operation in July 1995 and uses technology licensed from Showa Denko that allows us to produce HDPE. It currently has a capacity of 136 KT/A. The reaction system consists of a loop reactor system, which can be operated in a monomodal or bimodal configuration.

Except for a shared control room and shared raw materials, purification and utility systems, each polyethylene plant operates independently from the other and independently from our naphtha cracker. In the event of a shutdown of our naphtha cracker resulting in a cessation in the delivery of ethylene, as a short-term measure we could import ethylene and operate the two polyethylene plants using power co-generated by STG units or with electricity provided by public utilities.

***Polypropylene plant***

Our polypropylene plant consists of three trains with a combined capacity of 480 KT/A and uses technology licensed from Union Carbide. Our polypropylene plant produces homopolymers, random copolymers and impact copolymers and we are the only producer of impact copolymers in Indonesia. Our polypropylene plant commenced operations in 1992 and is supported by infrastructure, which includes a jetty, raw material storage facilities, three production reactors that provide flexibility in manufacturing various types of polypropylene

grades, and two finished product storage facilities with one facility located in Cilegon and the other facility located in Surabaya.

***Styrene monomer plants***

We operate two styrene monomer plants using technology licensed by CB&I with a combined capacity of 340 KT/A. Our styrene monomer plants are connected by pipelines and are supported by infrastructure which includes storage tanks and warehouses, power utilities, pipelines, jetties and transport facilities, a freshwater facility, boiler facility, air systems, laboratories, a nitrogen system and process control rooms.

***Butadiene plant***

We operate one butadiene plant which commenced commercial production in September 2013. Our butadiene plant has a capacity of 100KT/A and uses BASF technology licensed from CB&I. Our butadiene plant is connected by a pipeline to a cracker to supply it with mixed $C_4$ and is supported by three storage tanks with a total capacity of 6KT, a supply of electricity from PLN, process control rooms and transport facilities. We intend to increase the plant's capacity to 137 KT/A by way of our butadiene expansion project, which commenced construction in the first quarter of 2017 and which we expect to be operational in the second quarter of 2018. Our butadiene plant is the first and only one in Indonesia.

**Plant Performance**

We continue to enhance our production and augment our key plant performance. The table below sets forth the capacity utilisation rates of our plants for certain of our products for the time periods indicated.

| | For the year ended 31 December | | | For the three months ended 3 March |
|---|---|---|---|---|
| | 2014 | 2015 | 2016 | 2017 |
| **Capacity Utilisation Rates by Product:** | | *(%)* | | |
| Naphtha cracker | 93.5 | 56.5 | 89.7 | 99.7 |
| Polyethylene | 91.5 | 67.3 | 98.2 | 73.6 |
| Polypropylene | 99.3 | 92.4 | 89.2 | 99.9 |
| Styrene Monomer | 73.5 | 68.9 | 81.7 | 99.6 |
| Butadiene | 79.3 | 47.1 | 88.3 | 116.8 |

Notes:
(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. In 2016, our overall capacity utilisation rate was affected by a ramp-up of our new capacity additions in the first quarter of 2016.

***Quality control***

We maintain a quality control unit and two laboratories at the production facilities to monitor feedstock and other materials and products for compliance with contract specifications.

Our regular maintenance program ensures high plant availability and our quality controls are guided by International Organisation for Standardisation ("**ISO**") guidelines. The table below shows some of the key accreditations for our products and management systems.

| Accreditation | Application |
|---|---|
| SGS Certification Body | |
| • ISO 9001:2008 (valid until 31 July 2018) | Quality management system received by SMI with respect to SMI's manufacture of styrene monomer and toluene. |
| • ISO 14001:2004 (valid until 15 September 2018) | Environmental management systems, received by SMI with respect to SMI's manufacture of styrene monomer and toluene. |

| Accreditation | Application |
|---|---|
| SGS's Register | |
| • ISO 9001:2008 (valid until 15 September 2018) | Quality management systems, received by us with respect to our olefin and polyolefin plants. |
| • ISO 14001:2004 (valid until 15 September 2018) | Environmental management systems, received by us with respect to our olefin and polyolefin plants. |
| Japan Institute of Plant Maintenance | |
| • "Category A" Total Productive Maintenance ("**TPM**" ) excellence award | Plant improvement methodology, received by SMI in January 2017 |
| "Halal" Product Certificate for all plastic products | In January 2016, the Fatwa Majelis Ulama Indonesia ("**MUI**") council, Chairman of MUI and Director of the Foods, Drugs and Cosmetics Research Institute of MUI certified all of our polypropylene products; the certificate is valid until January 2018. |

***Maintenance***

We shut down our plants periodically for scheduled TAM and occasionally for unscheduled corrective maintenance. A TAM occurs every five years and typically for 45 days and includes major repair and scheduled maintenance of main machinery, major scheduled renewals and compliance with statutory requirements. We are scheduled to conduct TAM every five years at our naphtha cracker plant. During the period from 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. The next scheduled TAM for our naphtha cracker plant is in 2020.

We have two styrene monomer plants. Each requires SDM for a period of 26 to 30 days once every two years, which is the useful life of the catalysts we use. Historically, we intentionally alternated this SDM requirement so that we had to shut down only one plant per year. We also conduct regular inspections, reparation work and catalyst replacement so as to maximise the operating efficiency of our plants, and we expect to continue to do so going forward. In December 2016, we conducted a scheduled SDM which resulted in the stoppage of one of our styrene monomer plants for 30 days and are scheduled to conduct the next SDM at the end of 2018.

We expect to shut down our polyethylene plants for approximately two weeks during the TAM of our cracker and utility facilities, since operation of our polyethylene plants depends on the availability of electricity and steam. We also conduct preventive and corrective maintenance during brief stops in the operation of the polyethylene plants that occur concurrently with grade changes.

No major scheduled downtime is required for our polypropylene trains. Maintenance is done during brief stages in the operation of the plants for grade changes.

We conduct maintenance programs for our butadiene plant at the same time as a TAM for our naphtha cracker plant, during which we shut down our production of butadiene for a period of up to 40 days.

During the years ended 31 December 2014, 2015, 2016 and the three months ended 31 March 2017, we incurred maintenance costs of US$33.7 million, US$31.5 million, US$37.6 million and US$8.4 million, respectively.

**Capacity and Plant Improvements**

We are focusing on the debottlenecking and expansion of our production plants with the goal of increasing production capacity, reducing our cost of production and enhancing profit margins.

We completed our cracker expansion project in December 2015, which resulted in a 43% increase in the nameplate capacity of our products, namely ethylene (from 600 KT/A to 860 KT/A), propylene (from 320 KT/A to 470 KT/A), pygas (from 280 KT/A to 400 KT/A) and mixed $C_4$ (from 220 KT/A to 315 KT/A). We completed this project on time and within our budget.

We intend to undertake projects that will allow us to produce additional and higher value-added downstream products. For example, instead of selling the butadiene that we produce to merchant customers, we expect that SRI's synthetic rubber plant will utilise the butadiene to produce synthetic rubber.

We have also undertaken debottlenecking and expansion projects to increase the production capacity of some of our downstream plants to utilise additional volumes of ethylene and propylene produced by our naphtha cracker following the completion of our cracker expansion project.

The table below sets forth certain information on our major debottlenecking and expansion projects as of 31 March 2017.

| Project | Total Estimated Cost | Estimated Commencement of Operation[1] | Nameplate Capacity | |
|---|---|---|---|---|
| | *(US$ millions)* | | *(KT/A)* | |
| | | | **Current:** | **After:** |
| **Committed** | | | | |
| Butadiene expansion | 42.0 | Q2 2018 | 100 | 137 |
| Polypropylene debottlenecking project | 15.0 | Q3 2018 | 480 | 560 |
| Naphtha cracker furnace revamp | 45.0 | Q1 2021 | 860 | 900 |
| **In the pipeline** | | | | |
| New polyethylene plant | 300.0 | Q3 2019 | 336 | 736 |
| MTBE and Butene-1 plant | 100.0 | Q3 2020 | – | 130 MTBE<br>43 Butene-1 |

[1] Refers to estimated commencement of operations for new plants and commencement of full operations for existing plants.

***Butadiene Expansion***

To add value to incremental $C_4$ production and to minimise opportunity loss of exporting excess crude $C_4$, we intend to increase the nameplate capacity of our butadiene plant from 100 KT/A to 137 KT/A. As of 31 March 2017, we have awarded engineering, procurement and construction ("**EPC**") works to Toyo Engineering Korea in January 2017 and commenced construction in the same month. We expect to commence full operation of our butadiene plant in the second quarter of 2018.

The total projected cost for our butadiene expansion project is US$42.0 million, which we intend to fund by our internal cash. As of 31 March 2017, we have spent US$3.5 million for this project.

***Polypropylene Debottlenecking Project***

We have plans to debottleneck our polypropylene plant to increase its capacity from 480 KT/A to 560 KT/A. We intend to commence the polypropylene debottlenecking project and commence full operation of our polypropylene plant in the third quarter 2018.

The total projected cost for the polypropylene debottlenecking project is US$15.0 million, which we expect to fund by our internal cash. We have not yet incurred any expenditure for this project.

***Naphtha Cracker Furnace Revamp***

We have plans to further increase the nameplate capacity of our naphtha cracker for ethylene production from 860 KT/A to 900 KT/A, for propylene production from 470 KT/A to 490 KT/A and for by-product production

by a proportionate nameplate capacity. We expect to complete the naphtha cracker furnace revamp by first quarter of 2021.

The projected cost for our naphtha cracker furnace revamp project is US$40 to US$60 million, which we expect to fund by our internal cash. As of 31 March 2017, we have spent US$ 1.7 million for this project.

***New Polyethylene Plant***

As part of our vertical integration strategy and in order to maintain and grow our polymer market position in Indonesia, we intend to build a new polyethylene plant to produce LLDPE, HDPE and metallocene LLDPE, for which we intend to use a UNIPOL™ polyethylene process licensed from Univation Technologies. We expect that this new plant will increase our nameplate capacity of polyethylene by 400 KT/A to 736 KT/A from 336 KT/A, and we expect to commence operations of our new polyethylene plant in the third quarter of 2019. As of 31 March 2017, we have awarded front end engineering design work for this project to Toyo Engineering Korea and we expect to follow up with a final investment decision in the third quarter of 2017.

The total projected cost for our new polyethylene plant is US$300 million, which we intend to fund through a combination of external debt and internal cash. As of 31 March 2017, we have spent US$2.5 million on this project.

***MTBE and Butene-1 plant***

We have plans to build an MTBE and Butene-1 plant with a nameplate capacity to produce 130 KT/A of MTBE and 43 KT/A of butene-1 to secure butene-1 supply for our polyethylene plants and to take advantage of MTBE demand in Indonesia. We intend for the plant to commence operations in the third quarter of 2020.

The total projected cost for the project is US$100 million, which we intend to fund by our internal cash. We have not yet incurred any expenditure for this project.

***SRI Joint Venture***

As part of our downstream integration strategy and our efforts to produce higher-value added products, we have entered into a joint venture with Michelin to enter the synthetic rubber industry. SRI, our joint venture company between our wholly-owned subsidiary SMI and Michelin, have commenced construction of a new synthetic rubber plant to produce synthetic butadiene rubber in Cilegon, Banten. SRI awarded an EPC contract to Toyo Engineering Corporation in June 2015 and commenced construction of the plant in November 2015. We expect the synthetic rubber plant to commence operations in the first quarter of 2018.

The total projected cost for the synthetic rubber project is US$570 million, which we expect to fund by US$120 million in equity and the remaining by debt. As of 31 March 2017, SRI has spent approximately US$ 337 million on this project.

***Second Petrochemical Complex***

We are also planning to conduct a feasibility study to construct and operate a second petrochemical complex near our existing main petrochemical complex in Cilegon. We intend for the proposed petrochemical complex to comprise a one million tonne per year ethylene cracker and various downstream derivatives products. We expect this project to cost between US$4 to 5 billion. We have established a new company to undertake this second petrochemical complex. The shareholding structure of this new business venture is not yet finalised and we are in currently in discussions with various third parties. There is land available adjacent to our main petrochemical complex which we believe would be available for future acquisition, as necessary. However, we have not taken any firm steps to acquire land for this project.

**Support Facilities**

***Storage tanks and warehouses***

*Ethylene.* We typically maintain an inventory of 4 KT to 12 KT of ethylene, which is sufficient for approximately 5 days' average production. We have one ethylene storage tank which can store up to 11 KT of low pressure ethylene and three high pressure ethylene tanks of 500 MT each from which our polyethylene plant normally draws its feedstock. Low-pressure liquid is a more economical form to store and transport than

ethylene in high-pressure liquid form. We chill part of our ethylene output from our naphtha cracker and deliver the balance of the ethylene in gaseous form to our two polyethylene plants, as well as to our customers who take delivery by pipeline from our naphtha cracker.

*Propylene.* We have propylene storage facilities that can hold up to 31 KT of propylene, consisting of two low-pressure tanks, each with capacity of 12 KT, and three high-pressure tanks, which includes two tanks with a capacity of 2 KT and another with a capacity of 3 KT, or approximately 25 days of our production of propylene. Our production cycle takes about 60 days, starting from the placement of orders and procurement of raw materials to product delivery and payment by our customers. While we have no specific stocking or inventory policy, we maintain an average of two weeks' worth of raw materials for polypropylene. Our raw material inventory level varies from time to time as we pursue opportunistic spot purchases depending on the price and availability of goods. Stocking of other materials, such as catalysts and additives, is planned based on our production needs.

*Polyethylene and polypropylene.* We own three finished product storage facilities, two of which are located in Cilegon and one of which is located in Surabaya. The storage facilities have a total storage capacity of 70 KT, representing approximately 28 days of our polymer sales volume. We have a polyethylene warehouse for storing polyethylene on the plant site, which can hold up to 55 KT of polyethylene (which represents approximately 53 days of polyethylene sales volume), a polypropylene warehouse for storing polypropylene on the plant site, which can hold up to 15 KT of polypropylene (which represents up to 10 days' worth of polypropylene sales volume), and a satellite warehouse in Surabaya that can store both polyethylene and polypropylene.

*Styrene monomer.* We have two tanks for storing styrene monomer. The warehouses can hold up to 22 KT of styrene monomer, which represents approximately 24 days of sales volume.

*Feedstock and by-products.* We also have storage facilities for feedstock and by-products, fuel oil, diesel, LPG and other raw materials. Naphtha is stored in four tanks, three of which have a capacity of 46,000 kilo litres and one with a capacity of 95,000 kilo litres sufficient for approximately 27 days at full capacity operation. Pygas is stored in three tanks of 25,000 tonnes with a combined capacity for approximately 30 days of production. Miscellaneous tanks provide storage for fuel oils, diesel oil, LPG (used as fuel) and other raw materials and by-products.

***Power utilities***

As of 31 March 2017, our full production facilities at Cilegon and Serang in Banten Province required 60 MW of power during normal operations. We have on-site co-generation facilities, including a 51.56 MW GTG and a 31.25 MW STG located in our naphtha cracker plant. We obtain gas for our GTG pursuant to contracts with PT Perusahaan Gas Negara (Persero) Tbk and PT Banten Inti Gasindo and steam required for heaters and electricity co-generation at our naphtha cracker plant is generated principally by the naphtha cracking furnaces and two utility boilers fired by by-product methane and fuel oil streams. Our naphtha cracker, polyethylene and butadiene plants are also interconnected to receive electric power from PLN. We installed a 150 kV grid connection comprising a single feeder cable from PLN at our naphtha cracker, polyethylene and butadiene plants in April 2011 and integrated and synergised our GTG and STG facilities with PLN's 150 kV grid connection in June 2013 so that the facilities may serve as backup sources of power for each other in the event of a disruption. Our naphtha cracker, polyethylene and butadiene plants source approximately half of its power input from PLN and the remaining half from the GTG, with the STG used as a backup source of electricity in the event of a loss of power from the grid.

Our polypropylene and styrene monomer plants source their power primarily from PLN. We installed a 150 kV grid connection from PLN in November 2016 to enhance the reliability of power supply from PLN to our polypropylene plant. The styrene monomer plants have two emergency generators, but which are insufficient to maintain production in the event of an outage. The styrene monomer plants also operate four steam boilers, of which two are coal-fired boilers.

***Pipelines***

A network of pipelines connects our production plants to our tank farms and jetty facilities. These pipelines deliver certain materials, including naphtha, benzene and co-monomers, to our storage tanks and production plants, as well as certain finished products for sale to storage tanks and to the jetty facilities. We have a 2 km pipeline directly connecting our propylene production plants to our polypropylene trains, and a 45 km ethylene

pipeline connecting our production facilities in Cilegon to all of our ethylene customers concentrated in Anyer, Merak and Bojonegara.

We have obtained rights to construct and operate our pipelines on land owned by third parties, among others, PT Krakatau Steel (Persero) Tbk., PT Marga Mandalasakti, PT Kereta Api Indonesia, PT Krakatau Bandar Samudera and PT Krakatau Industrial Estate Cilegon, and governmental agencies for specific periods of time, typically for periods of five to 15 years, subject to renewal. Some of the rental fees are paid for annually and others are paid for five-year terms. Certain of these agreements have expired and we are in the process of renewing those expired agreements.

***Jetties and transport facilities***

We own three jetties that we use for importing naphtha and other feedstock and for exporting ethylene, pygas and, when required, for exporting propylene or other products. Jetties A and B have capacities to berth 80,000 DWT vessels, capable of handling ships with up to 75KT of cargo, and 6,000 DWT vessels, respectively while Jetty C has a capacity to berth 10,000 DWT vessels. The jetties are connected by pipelines to the storage tanks at our plant sites. At our facilities in Serang, Banten Province, we lease one jetty from one of our subsidiaries, RPU, with two berths capable of importing ethylene and benzene and exporting styrene monomer.

***Other support facilities***

*Water treatment plant.* We have a water treatment plant at our ethylene and polyethylene sites with the capacity to treat 5,760 tonnes of water per day, including boiler feed water, highly-purified water for use in circulating cooling systems and general utility water. In addition, our polypropylene and styrene monomer plants have their own demineralisation water unit with capacity of 20 $m^3$/hour and 53 $m^3$/hour, respectively.

*Cooling water and seawater systems.* Our ethylene, polyethylene, propylene and styrene monomer plants have cooling water systems which use seawater to pass through titanium plate heat exchangers on a once-through basis to cool the cooling water. The cooling water system is a closed system so that water losses are small. There are seven cooling water pumps with total capacity of approximately 40,000 $m^3$/hour in our ethylene and polyethylene plants. The seawater system has a total of five pumps, of which four pumps have a total capacity of 19,600 $m^3$/hour and one pump with capacity of 13,300 $m^3$/hour. We have a total of 19 titanium heat exchangers to cool the cooling water at our ethylene and polyethylene plants.

In our polypropylene plant, seawater is siphoned and screened by a motorised travelling screen. Our polypropylene plant is equipped with three pumps with a capacity of 2,300 $m^3$/hour each and one pump with capacity of 3,000 $m^3$/hour, circulated through nine titanium plate heat exchangers.

Our styrene monomer plants use two closed loop cooling water systems with titanium plate heat exchangers, one with a capacity of 6,500 $m^3$/hour and another with a capacity of 2,100 $m^3$/hour.

Our butadiene plant uses an open system cooling tower with a circulation capacity of 2,600 $m^3$/hour.

*Plant air and instrument air system.* We have five air compressors installed at our ethylene plant site and another two air compressors installed at each of our polypropylene and styrene monomer plants. The compressed air is used for the instrument air system, plant air system, and for cracking furnace de-coking. Typically, only three compressors are in use.

*Nitrogen system.* Nitrogen is supplied to us pursuant to a contract with PT Air Liquide Indonesia, which is due to expire in January 2027. Our naphtha cracker, polyethylene and polypropylene plants consume between 12,000 to 13,000 $Nm^3$/hr of nitrogen and our styrene monomer plant consumes around 650 $Nm^3$/hr of nitrogen. We believe PT Air Liquide Indonesia has adequate liquid nitrogen storage and vaporisation capacity to handle any of our emergency requirements. In addition, we also have our own nitrogen generator facility with a capacity of 5,500 $Nm^3$/hr to serve as back-up.

*Laboratory.* Our monomer laboratory is fully integrated into our quality control and plant process operations. Each shipment of raw material we receive is analysed upon arrival at the site. In the plant process, our lab performs routine analysis of various streams in addition to our onstream analysers that are part of the process. Products from our plants are continually monitored for quality, including those used in downstream processes. We also verify our liquid products by tank analysis prior to loading or shipping them.

Our polymer laboratory verifies and certifies each lot of polymer product as it enters our product warehouse. Polymer shipments cannot leave the plant site prior to undergoing quality certification by the laboratory. In addition, we also have a full customer service team to assist our customers. The laboratory incorporates film, blow moulding, and other equipment that we use to test our production runs, develop new products, as well as to assist our customers to improve their performance.

Our laboratory has a complete water testing facility. It is used to monitor water at various stages from the incoming raw water to the highest purity water used in our boilers. In addition, the laboratory monitors our facility's effluent water.

We also have a full oil analysis laboratory. It is used to monitor oil quality in our rotating equipment so that we can predict and prevent potential problems. Our oil laboratory is used for maintaining and improving plant reliability.

*Process control rooms.* We have three main process control rooms for our ethylene, polyethylene and polypropylene plants. In addition, we have a secondary control room for monitoring and controlling the utilities systems. The main process control rooms have fully-integrated computerised distributed control systems by Yokogawa and Honeywell. As a further aid to operations, we have a system of closed-circuit television cameras strategically placed throughout the facility. Our styrene monomer plants have two process control rooms with similar computerised distributed control system.

**Land and Properties**

Our integrated petrochemical complex comprises our main petrochemical complex in Ciwandan, Cilegon and a styrene monomer complex approximately 40 km from the main petrochemical complex, in Bojonegara, Serang. We own the land underlying our production plants pursuant to certificates of right to build which expiration dates ranging from 2019 to 2046. Some plots of our land used for these production plants are currently encumbered in favour of our creditors. We expect to renew these certificates upon their expiration.

We received certification as a Vital National Object ("**VNO**") of the Industrial Sector from the Ministry of Industry in 2014. This certification entitles our industry and our integrated petrochemical complex to receive security protection from the Indonesian National Police (*Kepolisian Negara Republik Indonesia* or "**Polri**") based on the necessity and estimation of the threats and/or disruptions that might occur in the form of a security protection performance guidance. Pursuant to Decree of the Head of Polri No. SKEP/738/X/2005 concerning Guidelines for Security System for Vital National Object, in the event of a threat and/or a disruption to a VNO involving members of the public who are not part of the VNO, Polri will take over the command and control of the security system for the VNO. Polri may request further security protection from the Indonesian National Army (*Tentara Nasional Indonesia*) if deemed necessary.

Our registered office is located at Wisma Barito Pacific Tower A, 7th floor, Jalan Let. Jend. S. Parman Kav 62-63, Jakarta 11410, Indonesia. Our executive and administrative offices in Jakarta are leased from a related party and occupy approximately 3,012 square metres.

**Intellectual Property**

***Licenses***

The table below sets forth certain information in respect of our existing production plants and the licenses in respect of their operations.

| Plant | Capacity | Commencement of Operations | Licensor |
|---|---|---|---|
| | *(KT/A)* | | |
| Naphtha cracker | | 1995 | CB&I |
| Ethylene | 860 | | |
| Propylene | 470 | | |
| Pygas | 400 | | |
| Mixed $C_4$ | 315 | | |
| Polyethylene UNIPOL™[(1)] | | 1995 | Univation Technologies |
| LL/HDPE | 200 | | |
| Polyethylene Showa Denko[(1)] | | 1995 | Showa Denko |
| HDPE | 136 | | |
| Polypropylene[(2)] | 480 | 1992 — Train 1 & 2 | Union Carbide[(3)] |

| Plant | Capacity | Commencement of Operations | Licensor |
|---|---|---|---|
| Styrene monomer | 340 | 1995 — Train 3<br>1992 — Plant 1<br>1999 — Plant 2 | CB&I |
| Butadiene | 100 | 2013 | CB&I |

(1) We market our polyethylene products under the name "Asrene®," our registered trademark.
(2) We market our polypropylene products under the name "Trilene®," our registered trademark.
(3) We had a license agreement with Union Carbide for the use of technical information and patents in relation to the production of polypropylene and retain the paid-up right to operate our current polypropylene trains using Union Carbide technology.

### *Trademarks and Copyrights*

We have registered the trademark to our brand names "Asrene®" (for polyethylene products), "Trilene®" (for our polypropylene products) and "Grene®" (for our resin products) in Indonesia and have registered the copyrights to our logos for "PT Chandra Asri", "Asrene" and "Grene".

The table below shows details of the trademarks we have registered with the Directorate General of Intellectual Property Rights of the Indonesian Ministry of Law and Human Rights (previously known as the Ministry of Justice):

| No | Trademark | Registration Number | Registration Date | Renewal Application Date |
|---|---|---|---|---|
| 1. | Asrene | IDM000015428 | 5 October 2004 | 18 December 2014 |
| 2. | Trilene | IDM000159259 | 24 August 2006 | 14 September 2015 |
| 3. | Grene | IDM000389324 | 10 June 2011 | 3 August 2016 |

The table below shows details of the copyrights we have registered with the Directorate General of Intellectual Property Rights of the Indonesian Ministry of Law and Human Rights (previously known as the Ministry of Justice):

| No | Copyrights | Registration Number | Registration Date | Validity |
|---|---|---|---|---|
| 1. | PT Chandra Asri | 033176 | 14 May 2007 | 28 November 2055 |
| 2. | Grene | 057444 | 14 February 2012 | 1 January 2061 |
| 3. | Asrene | 012649 | 4 October 1994 | 4 October 2044 |

We have submitted renewal applications for our registered trademarks to the Directorate General of Intellectual Property Rights of the Indonesian Ministry of Law and Human Rights.

## Sales, Marketing and Customers

Our products are sold as key raw materials for the production of a wide variety of consumer and industrial products. We sell olefins and by-products, polyethylene, styrene monomer and butadiene in both the domestic and export markets, and polypropylene in the domestic market. For the years ended 31 December 2014, 2015, 2016 and the three months ended 31 March 2017, 77.1%, 82.4%, 74.0% and 66.6% of our total net revenue was derived from domestic sales and the remainder was derived from export sales.

We appointed PT Sarana Kimindo Intiplas ("**SKI**") and PT Akino Wahanamulia ("**AW**") as our sales agents for some of our products to be sold in Indonesia. The agreements are typically valid for a period of one year and are renewable annually.

We have 49 staff members as part of our sales and marketing department and we maintain separate divisions to support monomers, styrene monomer and polymers sales. Our monomers and styrene monomer sales division consists of 11 staff members, and is responsible for marketing and selling ethylene, pygas, mixed $C_4$, butadiene and styrene monomer. Our polymers sales division consists of 38 staff members, and is responsible for marketing, selling and logistics for polyethylene and polypropylene.

### *Major customers*

The majority of our customers are located in Indonesia. We sell our products to a wide range of customers. By generating sales from a variety of customers, we believe that our reliance on any single customer is limited.

The table below sets forth the breakdown of our net revenue from our top ten customers, which represented 44% of our total net revenues for the year ended 31 December 2016:

| Customer | Products | Percentage of Net Revenue (%) | Customer Since | Location |
|---|---|---|---|---|
| Customer 1 | Polyethylene, polypropylene | 7.4 | 1995 | Indonesia |
| Customer 2 | Ethylene, propylene and styrene monomer | 5.1 | 2002 | Japan |
| Customer 3 | Styrene monomer and butadiene | 5.1 | 2004 | Indonesia |
| Customer 4 | Polyethylene, polypropylene | 4.5 | 1995 | Indonesia |
| Customer 5 | Ethylene | 4.5 | 1995 | Indonesia |
| Customer 6 | Ethylene | 4.1 | 2007 | Indonesia |
| Customer 7 | Butadiene, raffinate, styrene monomer, $C_4$ | 3.9 | 2002 | Singapore |
| Customer 8 | Pygas | 3.7 | 2011 | Thailand |
| Customer 9 | Propylene | 2.8 | 2011 | Indonesia |
| Customer 10 | Ethylene | 2.5 | 2006 | Indonesia |
| Top 10 Customers % of Net Revenue | | 43.5 | | |

The table below sets forth the breakdown of our net revenue from our top ten customers, which represented approximately 50% of our total net revenues for the three months ended 31 March 2017:

| Customer | Products | Percentage of Net Revenue (%) | Customer Since | Location |
|---|---|---|---|---|
| Customer 1 | Polyethylene, polypropylene | 8.0 | 1995 | Indonesia |
| Customer 2 | Butadiene, raffinate and styrene monomer | 7.6 | 2002 | Singapore |
| Customer 3 | Pygas | 6.8 | 2011 | Thailand |
| Customer 4 | Ethylene | 5.8 | 1995 | Indonesia |
| Customer 5 | Styrene monomer and raffinate | 5.4 | 2004 | Indonesia |
| Customer 6 | Ethylene and polyethylene | 3.7 | 2010 | Singapore |
| Customer 7 | Polyethylene and polypropylene | 3.5 | 1995 | Indonesia |
| Customer 8 | Ethylene | 3.3 | 2007 | Indonesia |
| Customer 9 | Ethylene | 3.0 | 2005 | Indonesia |
| Customer 10 | Ethylene | 2.9 | 2006 | Indonesia |
| Top 10 Customers % of Net Revenue | | 49.9 | | |

## Competition

We compete with other petrochemical producers on the basis of price, service, product quality, timely deliveries and overall customer service. Our competitors include some of the world's largest chemical companies and major integrated oil companies, many of whom have greater financial resources and also are more vertically integrated with their own raw material resources. We believe that some of the keys to competing in our industry include, among other things, customer relations, market position, the scale of facilities, low cost feedstock, geographical proximity to our customers and differentiated products and process technologies.

Price of petrochemical products are determined by market factors, such as supply/demand balances and feedstock costs that are beyond our control. We generally sell these products at prevailing market price like our competitors but, on occasion, negotiate the price.

We expect competition may come from countries in the Middle East and Southeast Asia. These companies may be Japanese traders such as Marubeni Corporation, Mitsui & Co. and other more integrated oil and petrochemical companies such as ExxonMobil, Petroleum Authority of Thailand and SABIC.

## Human Resources

### *Employees*

As of 31 March 2017, we had approximately 1,689 full-time employees. The table below sets forth the number of our employees by job function as of 31 March 2017.

| Job Function | Number of Employees |
|---|---|
| Senior Management | 3 |
| General Managers | 24 |
| Managers | 143 |

| Job Function | Number of Employees |
|---|---|
| Supervisory | 182 |
| Mechanics, technicians, engineers, officers | 719 |
| Operators, clerks | 618 |
| **Total** | **1,689** |

As of 31 March 2017, approximately 63% of our employees are members of the Labour Union. We have signed a collective labour agreement with the Labour Union which regulates our employees' welfare mechanism, work incentives, overtime wages, pension fund, health allowance, annual performance and holiday bonus. We typically negotiate the collective labour agreement every two years and signed the most recent collective labour agreement in 2015. Our relations with our employees have generally been good and there have not been any instances of collective union action, strikes and labour disruptions in the past three years.

Our employees receive compensation packages, which include basic salaries that comply with applicable minimum salary wage regulations, fixed allowance (housing and utility allowances) and other allowance (transportation and meal allowances), and annual bonuses distributed to eligible employees based on factors including individual and company performance. We also provide all of our permanent employees with a contributory pension fund program and a life insurance program, which is managed by PT Asuransi Jiwa Manulife Indonesia.

Human capital training and development remains a priority for us and we have implemented several initiatives to ensure that our employees are equipped with the right skill-sets and work experience. In 2016, we held over 12,000 man-days of technical and non-technical training programs attended by over 1,500 participants from managerial and non-managerial levels covering areas such as (i) safety, health, environment and quality control, which includes process safety management, hazard and operability studies, job safety analysis, emergency medical services and quality management systems, (ii) technical and functional competencies, such as project management and competency development programs and (iii) soft skill and leadership training by way of our Business Leadership Development Program and New Supervisor Development Program. Since 2016, we also collaborated with SCG Chemicals to identify and send our engineers for a one-year work assignment to Rayong, Bangkok to further develop their technical capabilities.

**Environmental Compliance**

We are subject to the laws and regulations of Indonesian and the regional government of Cilegon City, governing the use, storage, transportation and disposal of toxic and hazardous materials, including the discharge of effluents and emissions into the environment and otherwise relating to the protection of the environment. Our operations are supervised by several governmental entities, such as the Department of Industry, the State Ministry of Environmental Affairs, the Environmental Impact Management Agency, the Directorate General of Sea Transportation of the Department of Transportation and the regional government of Cilegon City, who are responsible for implementing and monitoring Indonesia's pollution control regulations and policies in the petrochemical industry.

Indonesian law requires those companies, including manufacturers, whose business activities are expected to have a potentially significant impact on the environment, to prepare an environmental impact assessment, environmental monitoring plan and environmental management plan in connection with certain operations that are considered likely to have an impact on the environment. The environmental impact assessment report must be submitted to a commission consisting of representatives of various national and local government agencies and non-governmental organisations before the construction of a facility. Once the commission approves the environmental impact assessment report, which sets out various compliance standards and other obligations, amendments to the environmental impact assessment report must be provided to a similar commission in connection with the commencement of the subject company's operations. For the original facilities, all appropriate environmental requirements were completed. As we debottleneck our facility, we are proceeding with the necessary environmental applications. We are using a third party contractor to prepare the required documentation for submission to both national and local governments and non-governmental organisations.

We have received certifications and awards for our efforts to ensure product quality and environmental-friendly production processes. We hold an ISO 9001 quality management system certificate and an ISO 14001 environmental compliance certificate from SGS S.A. (formerly Société Générale de Surveillance), an

internationally-recognised auditing body. Our ISO 9001 and ISO 14001 certificates are valid until September 2018. We also hold SMK3 certification, which is valid until August 2018 and OHSAS certification, which is valid until February 2018.

In addition, SMI also received a "Category A" Total Productive Maintenance ("**TPM**") excellence award from the Japan Institute of Plant Maintenance in January 2017, a "Level 4" Green Industry Award from the Ministry of Industry in December 2016 and an Ecolabel certification from the Ministry of Environment for our eco-friendly plastic products, which we sell under the mark "Grene®". SMI is the first petrochemical company in Indonesia to receive such TPM award and is also preparing to participate in the Excellence in Consistent TPM Commitment Awards in 2019. We also intend for our polymer and monomer plants to be assessed for a TPM excellence award in 2017 and 2018, respectively.

We believe our operations are in compliance in all material respects with applicable environmental laws and regulations currently in effect. We have had no environmental violation/incident that caused damage and/or claims. We have an annual budget for environmental control allocated to waste management, laboratory analysis, permits and environmental equipment, among others. All of our environmental licenses and permits are in full force and effect. In addition, we have entered into agreements for waste management with PT Holcim Indonesia Tbk, which is effective from 1 January 2016 until 31 December 2017, PT Prasadha Pamunah Limbah, which is effective from 1 January 2016 until 31 December 2017 and PT Multi Hanna Kreasindo, which is effective from 1 December 2016 until 1 December 2017.

Our waste water treatment complies with the decree of State Minister of Environmental Affairs, while waste disposal (toxic and hazardous) is disposed with a government body, namely Waste Management Indonesia.

**Health and Safety**

Our health and safety policies are based on the guiding principle that each employee is responsible not only for his or her own safety, but also for the safety of fellow workers. We have ongoing training programs for all phases of the safety system from plant site equipment and its usage, to safety permitting and material safety data. All levels of the plant organisation are included in a monthly safety awareness meeting. We also conduct walk-through inspections to verify safety conditions, employee activities and housekeeping. Pursuant to applicable regulation, we submit a monthly plant safety meeting report to the Office of Social and Manpower, a local governing body.

We believe that our health and safety activities instil a strong sense of safety awareness in our employees. In December 2014, we implemented internal guidance to reinforce safety awareness as our priority. As of 31 March 2017, our production facilities have completed 14.6 million man-hours without any lost time accidents. We received a zero accident award from the Banten Province Governor in February 2017 in recognition for our accomplishment in health and safety.

We have a fully-equipped fire station along with a core group of firemen. In addition, we have in place an emergency response team that includes firemen. Emergency training is conducted on an ongoing basis and drills are also conducted periodically.

At our plant, we have various qualified inspectors to maintain plant integrity. We do routine inspections of static equipment by various methods. Our static equipment inspectors are responsible for our compliance with local and national regulations regarding pressure vessels and fire equipment. We also have inspectors for all rotating equipment. Our inspection teams help us to ensure that the plant is kept in a safe condition. Results of our pressure vessel inspections are reported and registered with the national agency, the Department of Manpower.

We maintain compliance with health, safety and environmental regulations promulgated by local and national governing bodies. For example, we sample effluent wastewater on a daily basis at our olefin and polyolefin plants, except at our polypropylene where we sample effluent wastewater on a weekly basis. We also check pH, temperature, turbidity, oil content, suspended solids, chemical oxygen demand and biochemical oxygen demand. Typically, our results are within the required specification. We report this data on a monthly basis to the local regulatory office, the Office of Environment, Mine and Energy, and the State Ministry of Environment.

For compliance with stack emissions, heat stress, and noise surveys, we rely on third party analyses. These analyses are conducted on a quarterly basis and reported to the State Ministry of Environment.

Local government regulations require a quarterly check of the seawater outfall from the cooling water system exchangers. We complete the analysis using a third party and locally report this information to the relevant local regulator.

We believe we are in compliance with all relevant Indonesian safety regulations.

**Insurance**

We carry insurance for our operations against property damage and consequent business interruption through "all risks" policies. Our insurance is underwritten by Indonesian insurance companies and is, in turn, reinsured by major international insurance companies. Our existing "all risks" policies are in force until 20 June 2019.

Our "all risks" coverage has a maximum indemnification limit of approximately US$3.7 billion, representing the combined value at risk for property damages and business interruption. This coverage has a cap on liability of US$1.6 billion per occurrence for combined property damage and business interruption, and a cap of US$1.2 billion per occurrence and in annual aggregate in respect of national catastrophes, including fire.

Our insurance providers have created exclusions from our "all risks" insurance policies for losses resulting from terrorism, war and certain other events. While separate terrorism insurance coverage is available, premiums for such coverage are expensive, especially for chemical facilities, and the policies are subject to high deductibles. Available insurance coverage typically excludes coverage for losses from acts of foreign governments as well as nuclear, biological and chemical attacks. Our management has determined that it is not economically prudent to obtain additional terrorism insurance, especially given the significant risks that are not covered by such insurance.

We also have a third party liability policy, which covers losses caused to third parties as a result of our operations, including sudden environmental pollution, up to a limit of US$100 million per loss or occurrence. In addition to these policies, we maintain other insurance policies for specified risks, including marine cargo and transport insurance and other kinds of coverage that are not included in our "all risks" policies.

We received certification as a Vital National Object ("**VNO**") of the Industrial Sector from the Ministry of Industry in 2014. This certification entitles our industry and our integrated petrochemical complex to receive security protection from the Indonesian National Police based on the necessity and estimation of the threats and/or disruptions that might occur in the form of a security protection performance guidance. We may request for further security protection from the Indonesian National Army if deemed necessary.

We believe our insurance coverage is in accordance with industry standards in Indonesia and Southeast Asia.

**Legal Proceedings**

We are not a party to any legal proceedings which would, individually or taken as a whole, have a material adverse effect on our business, financial condition or results of operations.

## RISK FACTORS

The following list provides a brief summary of risks that could affect the Company's business, financial condition, results of operations and future prospects. The list is not exhaustive and there may be other risks that are unknown to the Company and other risks, currently believed to be immaterial, that could turn out to be material.

**Risks Relating to Our Business and Operations**

- Cyclicality in the petrochemical industry may materially and adversely affect our profitability.
- The volatility of the international market prices for petrochemical products may adversely affect our operating results.
- Fluctuations in the cost of feedstock may result in increased operating expenses and adversely affect our results of operations, cash flow and margins.
- We may not be able to complete our capacity and product expansion plans for our existing and new products.
- Loss of our competitiveness and market share in the Indonesian markets or increased global competition could materially and adversely affect our future growth, profitability and results of operations.
- Our operations are subject to factors beyond our control, which may subject us to unscheduled outages and shutdowns and which could have a material and adverse effect on our results of operations.
- Our operations require us to schedule regular shutdowns for maintenance, which could adversely affect our ability to make and sell products, which could have a material adverse effect on our business, financial conditions and results of operations.
- Our actual results may vary significantly from the industry forecasts, projections and estimates set forth herein.
- We do not own all of the land on which our existing pipelines and planned pipeline extensions are located. Inability to get the necessary consents to operate on these lands could disrupt our operations.
- Our level of indebtedness and other demands on our cash resources could materially and adversely affect our ability to execute our business strategy.
- The actions of any of our principal shareholders, Barito Pacific and SCG Chemicals, or their majority shareholders and associated companies could conflict with our interests.
- Trade-regulating actions by the Government, such as reducing or eliminating tariffs on imported polyethylene and polypropylene, could adversely affect our profitability.
- Our operations involve risks that may not be covered by our insurance or may have a material adverse effect on our business.
- Compliance with environmental and occupational health and safety laws and regulations may require us to incur costs or restrict our operations in a manner that could have a material adverse effect on our business, financial condition, profitability or cash flows.
- We depend on third party providers for various aspects of our business and such providers could fail to meet their obligations, which may have a material adverse effect on our business, results of operations and financial condition.

- If we are unable to obtain, renew or maintain our permits, approvals and technology licenses required to operate our business this may have a material adverse effect on our business.
- Our ability to compete effectively depends in part on our ability to attract and retain key personnel with relevant industry knowledge.
- The loss of any of our large customers could have a negative impact on our results of operations.
- Our production plants are located in a single geographic area. Any disruption in our operations due to accidents or natural disasters in this area could have a material adverse effect on our operations.
- Failure or disruption of our IT and/or ERP systems may adversely affect our business, financial condition, results of operations and prospects.
- Failure to fulfil our obligations under supply agreements may result in lower sales prices and may adversely affect our business, financial condition, results of operations and prospects.

**Risks Relating to Indonesia**

- Domestic, regional or global economic changes may adversely affect our business.
- Political and social instability in Indonesia may adversely affect us.
- Indonesia is located in a geologically active zone and is subject to the risk of significant geological and other natural disasters, which could lead to social and economic instability.
- Terrorist attacks and activities could cause economic and social volatility, which may materially and adversely affect our business.
- Our employees are members of a labour union and we may be subject to labour disputes, industrial unrest, slowdowns and increased wage costs, which may adversely affect our business and results of operations.
- Labour activism and legislation could adversely affect us, our customers and Indonesian companies in general, which in turn could affect our business, financial condition and results of operations.
- Outbreak of an infectious disease, or fear of an outbreak, or any other serious public health concerns in Asia (including Indonesia) and elsewhere may adversely impact our business and financial conditions.
- Growing regional autonomy creates an uncertain business environment for us and may increase our costs of doing business.
- Fluctuations in the value of the Rupiah may materially and adversely affect our financial conditions and results of operations.
- Downgrades of credit ratings of the Government or Indonesian companies could materially and adversely affect our business.
- Indonesian accounting standards differ from U.S. GAAP.
- Regional authorities may impose additional and/or conflicting local restrictions, taxes and levies.
- Indonesia may suffer from governmental or business corruption.
- Potential enforcement of collaterals against the Company's assets could have a material adverse effect on our business operations.

**Risks Relating to Ownership of the Shares**

- The Rights and Offer Shares cannot be freely resold in the United States.
- The trading price of the Shares has been, and may continue to be, volatile.
- Your right to participate in future rights issues could be limited, which would cause dilution to your holdings.
- Future changes in the value of the Rupiah against the U.S. dollar or other currencies will affect the foreign currency equivalent of the value of our Shares and any dividends.
- Indonesian law contains provisions that could discourage a takeover of the Company.
- Indonesian law contains provisions that could cause the Company to forego transactions that are in our best interest.
- You may not be subject to limitations on minority shareholders' rights.
- Future sales of our Shares or the prospect of such future sales by any one of our principal shareholders may have a material adverse effect on the market price of the Shares.
- We operate in a legal system in which the application of various laws and regulations may be uncertain, and through the purchase of the Shares, holders of the Shares are exposed to such legal system and may find it difficult or impossible to pursue claims relating to the Shares.
- We are incorporated in Indonesia and it may not be possible for investors to effect service of process, or enforce judgments on us in the United States or of a foreign court against us in Indonesia.
- Indonesian law may operate differently from the laws of other jurisdictions, with regard to the convening of, and the right of shareholders to attend and vote at, general meetings of shareholders of the Company.
- The regulations governing Indonesian securities markets differ from those in other markets, which may cause the market price of our Shares to be more volatile and less liquid; the limited public ownership of our Shares may contribute to a lack of liquidity.
- There may be less company information available, and corporate governance standards may differ, for public companies listed on the Indonesian securities markets as compared to those listed on securities markets in other countries.
- Our ability to pay dividends in the future will depend upon future earnings, financial condition, cash flows, working capital requirements and capital expenditures and dividends will be paid in Rupiah.

## CERTAIN INDUSTRY INFORMATION

### The Petrochemical Sector

Petrochemicals are chemical products derived from petroleum and other hydrocarbon sources. In 2016, total global industry revenues for the sector were estimated at approximately US$3 trillion.

**Table 1.1 Overview of Petrochemical Products**

| | | | Global | | SEA* | | Indonesia | |
|---|---|---|---|---|---|---|---|---|
| Building Block | Derivative | Key Derivatives and/or Applications | Demand 2016 (mtpa) | %CAGR (2017-2023)F | Demand 2016 (mtpa) | %CAGR (2017-2023)F | Demand 2016 (mtpa) | %CAGR (2017-2023)F |
| Ethylene | | Feedstock for polyethylene | 147 | 3.2 | 10.3 | 3.7 | 1.4 | 0.5 |
| | Polyethylene | Packaging, agriculture, automotive, construction | 91 | 3.4 | 5.7 | 3.9 | 1.3 | 4.4 |
| Propylene | | Feedstock for polypropylene | 97 | 3.4 | 6.0 | 7.0 | 0.8 | 1.4 |
| | Polypropylene | Packaging, textiles, automotive, construction | 64 | 3.6 | 4.8 | 4.2 | 1.5 | 4.7 |
| Butadiene | | Feedstock for SB Rubber, Butadiene Rubber, ABS | 11 | 2.4 | 0.7 | 5.5 | 0.1 | 17.7 |
| Styrene | | Feedstock for PS, ABS, SB Latex, UPR, SB Rubber | 29 | 1.6 | 1.3 | 2.3 | 0.2 | 10.5 |

Note: SEA* = South East Asia including Indonesia, Malaysia, Philippines, Singapore, Thailand and Vietnam

Note: CAGR = Compound Annual Growth Rate

Note: mtpa = million tons per annum

Note: F = Forecast

Source: Nexant

### Industry Outlook

Petrochemical industry margins are subject to cyclicality. Changes in supply and demand and resulting plant operating utilisation levels ("operating rates") are key factors that influence the cycle and the profitability of the petrochemical sector. Additionally the sector is highly capital intensive. This also contributes to cyclicality as new investments usually occur at the same time, following periods of sustained higher profitability. The price of crude oil directly impacts the production costs and selling prices of most petrochemical products.

Crude oil prices have declined sharply since 2013 due to significant increases in global production. The supply landscape of crude oil has been enhanced by the further development of U.S. shale oil resources and the removal of sanctions on Iranian crude oil in January 2016. These factors contributed to a market oversupply and resulted in crude oil prices falling below US$30 per barrel in Q1 2016. Oil prices have since recovered from those low levels to trade within the US$40-55 per barrel range from Q2 2016 to Q1 2017. Going forward the current pricing stability is forecast to be sustained. A modest increase in short term pricing is feasible and supported by OPEC and non-OPEC decisions to cut production towards the end of 2016. Crude oil prices were marginally higher in Q1 2017 at close to US$54 per barrel.

Petrochemical markets have been exposed to cyclical changes in supply and demand. These changes are usually closely linked to economic growth patterns, especially in China given its strong manufacturing base. Global supply continues to increase, with renewed investments in the United States following increased shale gas availability. Conversely, capacity developments in the Middle East have slowed considerably due to lower availability of advantaged feedstocks for new projects. Asian capacity also continues to grow rapidly, led by investments in China. European producers remain heavily exposed to imports penetrating into Europe and displacement of uncompetitive material from traditional export markets.

Demand for olefins globally is projected to grow at approximately 3.3% CAGR (compound average annual growth rate) over the 2017-2023 period (3.4 and 3.2% CAGR for propylene and ethylene respectively) based on a high rate of current and future investments in propane dehydrogenation (propylene made from propane) and coal to olefin projects in China. Butadiene demand growth over the same period is forecast at 2.4%. Investments in new downstream derivatives capacity (products from these petrochemical building blocks) are continuing throughout the Asian region.

Global polyethylene demand was estimated at approximately 91 million tons while polypropylene demand was around 64 million tons in 2016. Those are forecast to grow at approximately 3.4% CAGR over the period 2017-2023. Demand for benzene globally reached 46 million tons in 2016. Nexant forecasts styrene demand to grow at 1.6% CAGR over the period 2017-2023. Principal demand drivers for these petrochemical products are associated with packaging, automotive, construction and electrical/electronic markets.

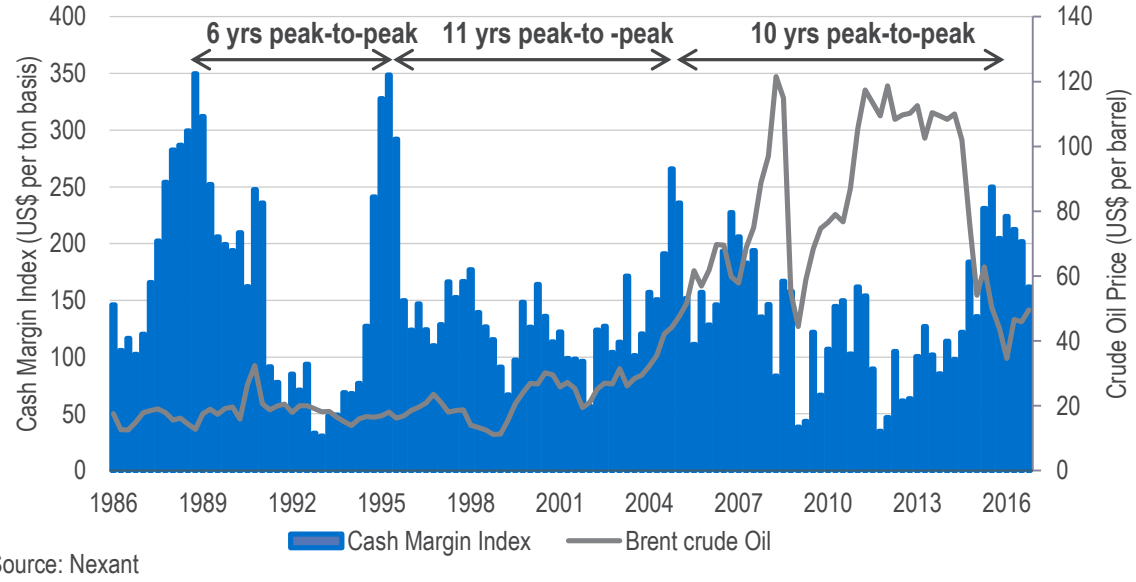
**Pricing and Profitability**

Industry demand is primarily influenced by economic activity while supply is affected by new capacity additions. Capital spending cycles are a common theme of the petrochemical sector as companies usually have access to large cash reserves at the same time. In times of economic growth, profitability is high resulting in multiple new investments in plant capacity. This often results in periods of oversupply as large increments of new capacity are realised at the same time. This leads to lower pricing and depressed margins for extended periods of time until the new capacity can be absorbed by new demand growth. Cyclicality also promotes industry restructuring, mergers, demergers and acquisitions. These factors may also result in capacity rationalisation whereby older, smaller scale, higher cost production units are closed.

Petrochemical industry cycles vary in length. However, historic data suggests that average cycle lengths have been between 6-11 years in duration, measuring peak to peak. Due to the global nature of the industry (connected through trade and pricing), the profitability of most commodity petrochemicals tends to follow a similar cycle. Therefore most products typically demonstrate peak or trough levels of profitability over the same periods. Occasionally, structural changes in a given market can cause profitability of one sector to diverge from the overall industry cycle.

**Figure 2.1 Petrochemical Industry Cyclicality**

*(Cash margin index –commodity chemicals & polymers)*




Source: Nexant

Figure 2.2 provides an overview of petrochemical industry profitability and highlights the cyclicality of the sector. Profitability is represented as a cash margin index. Cash margin presented represents the price of a petrochemical product minus its cash cost of production, excluding finance costs, depreciation and taxes. Data is based on an average for leading petrochemical plants in the region. This gives an estimated weighted average cash margin for the industry.

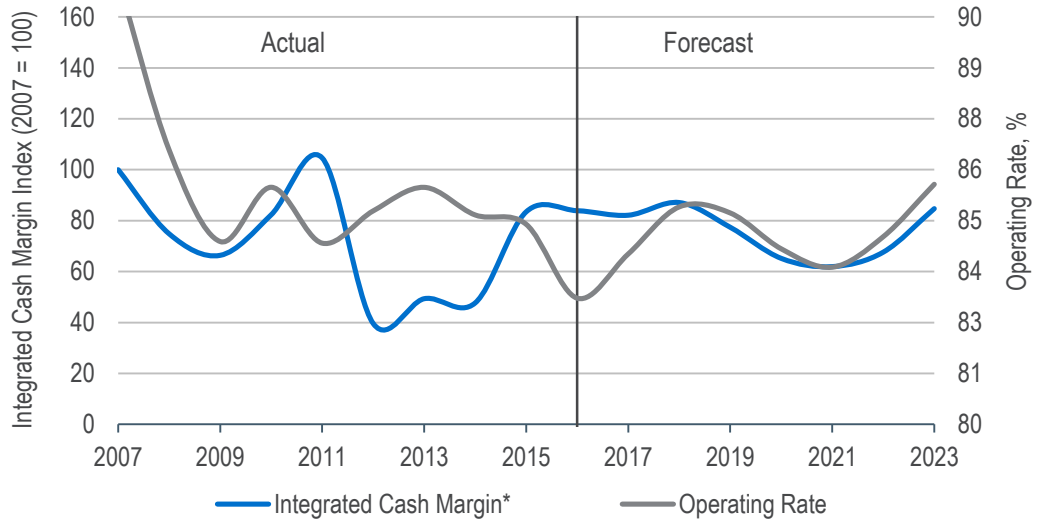
***Asian Petrochemical Profitability***

Average industry profitability levels rebounded since a low point in 2012. A good level of profitability has been sustained over the past two years and indicates a new cyclical peak over this period. Structurally the industry has benefited from modest supply additions over the period 2013-2016 whilst demand levels have remained steady with some recovery in the global economy observed through 2014. In 2015, the large drop in both crude oil and naphtha costs also contributed to improved cash margins for producers. New capacity, particularly in China, has been partially offset by some capacity closures of non-competitive units in other North-East Asia countries. Profitability has declined modestly in 2016, owing principally to increased supply across the propylene value chain, but this was partially off-set by better market fundamentals for ethylene and butadiene value chains.

With crude oil prices increasing in Q1 2017, petrochemical margins in Asia were contracted for some products. Relatively weak seasonal demand, around the Lunar New Year holidays, limited price increases for the following products, polyolefins, propylene and butadiene derivatives. Conversely tighter market supply in ethylene, butadiene and aromatics resulted in price increases being implemented and improved product margins for integrated petrochemical producers.

**Figure 2.2 Asian Petrochemical Industry Profitability**

*(Annual average integrated cash cost margin)*




Note: Integrated cash cost margin for all commodity petrochemical products, across all integrated complexes in SEA

Source: Nexant

Asian markets are more heavily influenced by transactions in spot markets, contrary to the preference for contract volumes in Western markets. Market sentiment and opportunistic purchasing patterns in spot markets promote more volatility in profitability of Asian operations. However, strength of underlying markets (indicated by operating rates) remains the principle influence of profitability in the longer term.

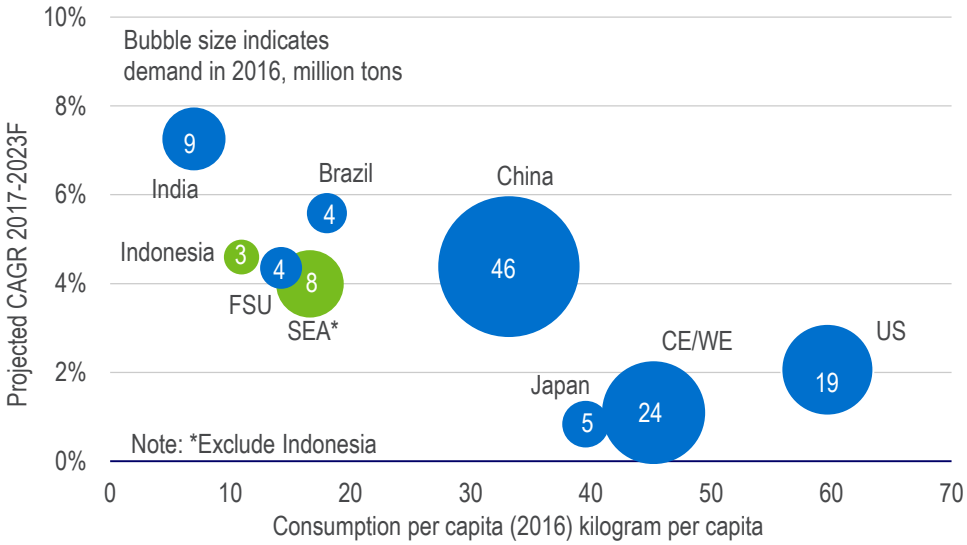
In the short-term new capacity additions, primarily in China and the U.S., will put downward pressure on industry margins. However it is assumed that Asia will lead global demand growth, progressively absorbing major new capacity additions. The profitability of the Asian petrochemical industry is forecast to fluctuate near the historical average over the next five years. Future margins are expected to be sufficient to support selective investment in new capacity capturing some form of cost advantage through feedstock sourcing or downstream integration.

**Consumption of Petrochemicals**

Consumption growth of petrochemicals can be measured by total olefins (ethylene and propylene) demand, which form two of the key industry building blocks. However, most olefins are used for captive consumption to produce other downstream derivative products from ethylene and propylene (such as polyolefins) onsite. Therefore, actual consumption growth of olefins by region does not provide a clear overview of end-user

demand. As such consumption of polyolefins provides a more accurate representation of petrochemicals demand by region as they are consumed directly by end users in a wide variety of key end uses such as construction, automotive, packaging, agricultural products, textiles and various consumer goods.

**Polyolefins Consumption per Capita**




*Note: FSU means Former Soviet Union, CE means Central Europe, WE means Western Europe*

Source: Nexant

**Historical and Forecast Prices**

| Current US$ per ton - South East Asia | | | Actual | | | | | | | | Brent Oil Scenarios | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | 55$/bbl | 65$/bbl | 70$/bbl | | | | |
| | | | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017-YTD Feb | 2018F | 2019F | 2020F | 2021F | 2022F | 2023F |
| Crude Oil - Dubai | FOB Fateh | US$/ton | 448 | 568 | 771 | 792 | 766 | 702 | 370 | 300 | 388 | 469 | 516 | 526 | 537 | 548 | 559 |
| | FOB Fateh | US$/bbl | 62 | 78 | 106 | 109 | 106 | 97 | 51 | 41 | 53 | 65 | 71 | 72 | 74 | 75 | 77 |
| Crude Oil - Brent | FOB North Sea | US$/ton | 465 | 603 | 841 | 844 | 821 | 749 | 399 | 333 | 424 | 511 | 561 | 572 | 584 | 595 | 607 |
| | FOB North Sea | US$/bbl | 62 | 80 | 111 | 112 | 109 | 99 | 53 | 44 | 56 | 68 | 74 | 76 | 77 | 79 | 80 |
| Naphtha | FOB SEA | US$/ton | 547 | 713 | 921 | 932 | 910 | 865 | 474 | 383 | 507 | 596 | 651 | 665 | 678 | 691 | 705 |
| Propane | FOB Singapore | US$/ton | 511 | 730 | 845 | 947 | 881 | 808 | 460 | 346 | 495 | 559 | 611 | 624 | 636 | 648 | 661 |
| Butane | CFR SEA | US$/ton | 517 | 735 | 899 | 940 | 914 | 826 | 483 | 385 | 511 | 577 | 630 | 644 | 656 | 669 | 682 |
| LPG | CFR SEA | US$/ton | 513 | 732 | 867 | 944 | 894 | 815 | 469 | 362 | 501 | 566 | 619 | 632 | 644 | 657 | 670 |
| Crude C4 | FOB SEA | US$/ton | 647 | 813 | 1021 | 1032 | 1010 | 965 | 568 | 459 | 608 | 715 | 782 | 798 | 814 | 830 | 846 |
| Pyrolysis gas | FOB SEA | US$/ton | 601 | 784 | 1013 | 1026 | 1001 | 952 | 521 | 421 | 581 | 656 | 716 | 732 | 746 | 761 | 776 |
| Ethylene | CFR SEA | US$/ton | 873 | 1075 | 1168 | 1221 | 1354 | 1400 | 1102 | 1045 | 1111 | 1183 | 1165 | 1094 | 1083 | 1112 | 1147 |
| Propylene | CFR SEA | US$/ton | 949 | 1191 | 1358 | 1285 | 1348 | 1241 | 788 | 722 | 887 | 972 | 986 | 965 | 986 | 1025 | 1082 |
| Butadiene | CFR SEA | US$/ton | 1028 | 1908 | 2937 | 2446 | 1480 | 1281 | 888 | 1127 | 1475 | 1399 | 1415 | 1416 | 1409 | 1451 | 1507 |
| Benzene | FOB SEA | US$/ton | 702 | 928 | 1125 | 1219 | 1314 | 1221 | 698 | 646 | 790 | 853 | 908 | 930 | 931 | 969 | 1027 |
| Toluene | CFR SEA | US$/ton | 719 | 856 | 1104 | 1211 | 1195 | 1067 | 695 | 626 | 723 | 817 | 869 | 892 | 917 | 941 | 963 |
| Styrene | CFR SEA | US$/ton | 993 | 1222 | 1419 | 1475 | 1722 | 1526 | 1107 | 1057 | 1189 | 1248 | 1273 | 1276 | 1275 | 1315 | 1406 |
| Styrene-Indonesia | CFR SEA | US$/ton | 1042 | 1283 | 1490 | 1549 | 1808 | 1602 | 1162 | 1110 | 1249 | 1310 | 1337 | 1340 | 1339 | 1381 | 1476 |
| Styrene-China | FD Contract | US$/ton | 993 | 1222 | 1419 | 1475 | 1722 | 1526 | 1107 | 1057 | 1189 | 1248 | 1273 | 1276 | 1275 | 1315 | 1406 |
| MTBE | FOB SEA | US$/ton | 683 | 804 | 1083 | 1115 | 1090 | 1006 | 675 | 573 | 657 | 739 | 807 | 824 | 840 | 857 | 873 |
| LDPE | CFR SEA | US$/ton | 1181 | 1478 | 1576 | 1339 | 1521 | 1568 | 1254 | 1192 | 1300 | 1397 | 1418 | 1377 | 1374 | 1394 | 1427 |
| LLDPE | CFR SEA | US$/ton | 1157 | 1300 | 1328 | 1327 | 1473 | 1547 | 1224 | 1152 | 1246 | 1361 | 1372 | 1324 | 1318 | 1334 | 1364 |
| HDPE (IM) | CFR SEA | US$/ton | 1122 | 1224 | 1354 | 1353 | 1467 | 1523 | 1232 | 1139 | 1231 | 1352 | 1357 | 1305 | 1299 | 1319 | 1351 |
| PP (homopolymer) | CFR SEA | US$/ton | 1066 | 1310 | 1533 | 1401 | 1487 | 1498 | 1109 | 982 | 1109 | 1211 | 1241 | 1222 | 1230 | 1257 | 1302 |
| Raffinate-1 | CFR SEA | US$/ton | 652 | 820 | 1111 | 1146 | 1106 | 1030 | 642 | 521 | 659 | 741 | 808 | 826 | 842 | 859 | 875 |
| Deflator | | | 0.90 | 0.91 | 0.93 | 0.94 | 0.96 | 0.98 | 0.99 | 1.00 | 1.02 | 1.04 | 1.06 | 1.08 | 1.10 | 1.13 | 1.15 |

**@ Brent US$55/bbl (YTD-Feb 2017) (Constant 2016 US$)**
**@ Brent US$65/bbl (2018) (Constant 2016 US$)**
**@ Brent US$70/bbl (2019-2023) (Constant 2016 US$)**

*Source: Nexant*

**The Indonesian Petrochemical Industry**

The petrochemicals industry continues to play an important role in Indonesia's fast growing economy. Initially domestic industry developments were primarily focused in methanol, ammonia and agricultural sectors. Investment in these sectors has been facilitated by domestic availability of natural gas. However, over the last decade, the Indonesian petrochemical sector has developed further and has expanded into olefins and olefin downstream derivatives production including polyolefins. These products are being consumed locally for packaging, construction and the wider manufacturing sectors.

Government stimulus packages designed to improve basic infrastructure are also further driving domestic demand for chemicals, primarily for construction materials. With a significant population around 262 million and a significant potential for material substitution with plastics, potential demand growth of basic chemicals and polymers remains positive over the medium and long term. The consumption per capita is low compared to other Asian countries but is forecast to increase.

Indonesia is dependent on imports from other countries to satisfy its consumption of petrochemicals. Total imports of polyolefins in 2016 are estimated at over 1.5 million tons, with the majority of these imports coming from neighbouring Malaysia, Thailand and Singapore. Total polyolefin imports are set to remain at around one to two million tons per annum in the long term.

CAP, Lotte Chemical Titan and Pertamina (state owned company) are each separately evaluating petrochemical capacity expansion projects in Indonesia. These projects would consist of a new world scale naphtha cracker and downstream polyolefins plants. However these projects are currently under evaluation. The exact timeline for these expansions is not certain and hence Nexant assumes no firm capacity additions for polyolefins before 2023. Therefore net imports of both polyethylene and polypropylene are forecast to remain at high levels.

**Overview of Indonesian Petrochemical Industry**

| Products | Capacity 2016 (Thousand Tons) | Demand 2016 (Thousand Tons) | Net Export 2016 (Thousand Tons) | CAGR (2009-2016) | CAGR (2017-2023)F |
|---|---|---|---|---|---|
| Ethylene | 860 | 1384 | -619 | 3.1 | 3.1 |
| Propylene | 1078 | 811 | -8 | 5.3 | 1.7 |
| Butadiene | 100 | 64 | 6 | 3.6 | 17.7 |
| Polyethylene | 790 | 1317 | -653 | 21.2 | 13.1 |
| HDPE | 390 | 607 | -249 | 7.5 | 4.4 |
| LLDPE | 400 | 510 | -204 | 8.5 | 4.7 |
| LDPE | 0 | 200 | -200 | 5.2 | 4.0 |
| Polypropylene | 765 | 1513 | -860 | 7.9 | 4.7 |
| Styrene | 341 | 185 | 56 | 1.0 | 10.5 |

**Overview of Major Indonesian Petrochemical Producers (2016)**

| Capacity (' 000 tons per year) | Chandra Asri | Lotte Chemical Titan | Pertamina | Polytama | Asahimas | Sulfindo Adiusaha | TPPI | Others |
|---|---|---|---|---|---|---|---|---|
| Ethylene | 860 | - | - | - | - | - | - | - |
| Propylene | 470 | - | 608 | - | - | - | - | - |
| LLDPE | 200 | 200 | - | - | - | - | - | - |
| HDPE | 136 | 250 | - | - | - | - | - | - |
| Polypropylene | 480 | - | 45 | 240 | - | - | - | - |
| Ethylene Dichloride | - | - | - | - | 644 | 370 | - | - |
| Vinyl Chloride Monomer | - | - | - | - | 734 | 130 | - | - |
| Polyvinyl Chloride | - | - | - | - | 507 | 95 | - | 202 |
| Ethylene Oxide | - | - | - | - | - | - | - | 240 |
| Ethylene Glycol | - | - | - | - | - | - | - | 220 |
| Acrylic Acid | - | - | - | - | - | - | - | 140 |
| Butanol | - | - | - | - | - | - | - | 20 |
| Ethylhexanol | - | - | - | - | - | - | - | 140 |
| Py-Gas | 400 | - | - | - | - | - | - | - |
| Crude C4 | 315 | - | - | - | - | - | - | - |
| Butadiene | 100 | - | - | - | - | - | - | - |
| Benzene | - | - | 125 | - | - | - | 400 | - |
| Para-Xylene | - | - | 298 | - | - | - | 540 | - |
| Styrene | 340 | - | - | - | - | - | - | - |
| Total | **3,301** | **450** | **1,076** | **240** | **1,885** | **595** | **940** | **962** |

*Source: Nexant*

*This announcement is not for distribution in the United States. This announcement and the information contained herein is not an offer to sell securities in the United States. Securities may not be offered or sold in the United States or to, or for the account or benefit of a U.S. person (as such term is defined in Regulation S under the U.S. Securities Act of 1933, as amended (the "**Securities Act**")) absent registration pursuant to the Securities Act, or an exemption from registration. Any public offering of securities to be made in the United States will be made by means of an offering circular that may be obtained from the issuer or selling security holder and that will contain detailed information about the issuer and management, as well as financial statements. No money, securities or other consideration is being solicited by this announcement or the information contained herein and, if sent in response to this announcement or the information contained herein, will not be accepted.*

*This announcement does not constitute or form part of any offer to purchase, a solicitation of an offer to purchase, an offer to sell or a solicitation of an offer to sell, any securities of the Company or any other person and neither this announcement nor anything contained herein shall form the basis of or be relied on in connection with any contract or commitment whatsoever.*

*Certain statements in this announcement constitute "forward-looking statements", including statements regarding the Company's expectations and projections for future operating performance and business prospects. Such forward-looking statements involve known and unknown risks, uncertainties and other factors which may cause the Company's actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by such forward-looking statements. Such forward-looking statements are based on numerous assumptions regarding the Company's present and future business strategies and the environment in which it will operate in the future. You are cautioned that actual results may differ materially from those set forth in the forward-looking statements contained herein, and particular attention should be paid to the risks described herein.*