CAUTIONARY STATEMENT

The statements in this presentation relating to matters that are not historical facts are forward-looking statements. These forward-looking statements are based upon assumptions of management which are believed to be reasonable at the time made and are subject to significant risks and uncertainties. Actual results could differ materially based on factors including, but not limited to, the business cyclicality of the chemical, polymers and refining industries; the availability, cost and price volatility of raw materials and utilities, particularly the cost of crude oil, natural gas, and associated natural gas liquids; competitive product and pricing pressures; labor conditions; our ability to attract and retain key personnel; operating interruptions (including leaks, explosions, fires, weather-related incidents, mechanical failure, unscheduled downtime, supplier disruptions, labor shortages, strikes, work stoppages or other labor difficulties, transportation interruptions, spills and releases and other environmental risks); the supply/demand balances for our and our joint ventures’ products, and the related effects of industry production capacities and operating rates; our ability to achieve expected cost savings and other synergies; our ability to successfully execute projects and growth strategies; any proposed business combination, the expected timetable for completing any proposed transactions and the receipt of any required governmental approvals, future financial and operating results, benefits and synergies of any proposed transactions, future opportunities for the combined company; legal and environmental proceedings; tax rulings, consequences or proceedings; technological developments, and our ability to develop new products and process technologies; potential governmental regulatory actions; political unrest and terrorist acts; risks and uncertainties posed by international operations, including foreign currency fluctuations; and our ability to comply with debt covenants and service our debt. Additional factors that could cause results to differ materially from those described in the forward-looking statements can be found in the “Risk Factors” section of our Form 10-K for the year ended December 31, 2018, which can be found at www.LyondellBasell.com on the Investor Relations page and on the Securities and Exchange Commission’s website at www.sec.gov.

The illustrative results or returns of growth projects are not in any way intended to be, nor should they be taken as, indicators or guarantees of performance. The assumptions on which they are based are not projections and do not necessarily represent the Company’s expectations and future performance. You should not rely on illustrated results or returns or these assumptions as being indicative of our future results or returns.

This presentation contains time sensitive information that is accurate only as of the date hereof. Information contained in this presentation is unaudited and is subject to change. We undertake no obligation to update the information presented herein except as required by law.

Explanations and reconciliations for our non-GAAP measures can be found in the Appendix to this presentation.
A GLOBAL LEADER

TOP POSITIONS IN THE HEART OF A LARGE AND ATTRACTIVE MARKET

$4 Trillion
2018 CHEMICAL INDUSTRY GLOBAL REVENUES

# 1
PP COMPOUNDS, POLYOLEFIN LICENSING
Globally
POLYETHYLENE
Europe

# 2
POLYPROPYLENE, PROPYLENE OXIDE, OXYFUELS
Globally
ETHYLENE, PROPYLENE, STYRENE
North America

# 3
POLYETHYLENE + POLYPROPYLENE
Globally
ACETIC ACID
POLYETHYLENE
North America

Source: LyondellBasell and industry consultants. Product rankings are as of December 31, 2018.
PERFORMANCE SNAPSHOT
DIVERSIFIED PORTFOLIO AND GLOBAL SCALE DRIVING RESILIENT RESULTS

$3.5 B
NET INCOME
LTM 3Q19

13.2%
FREE OPERATING
CASH FLOW YIELD
LTM 3Q19

$5.7 B
EBITDA
LTM 3Q19

30%
ROIC
2015-2018 Average

REPORTING SEGMENTS
EBITDA LTM 3Q19

- Olefins & Polyolefins – Americas
  - $2,435 MM
- Olefins & Polyolefins – Europe, Asia, International
  - $1,045 MM
- Intermediates & Derivatives
  - $1,607 MM
- Advanced Polymer Solutions
  - $456 MM
- Refining
  - -$171 MM
- Technology
  - $334 MM

NOTE: Advanced Polymer Solutions EBITDA includes $98 million of non-recurring transaction and integration costs.
COMPELLING INVESTMENT THESIS

LEADING global portfolio of proven, flexible and focused businesses in large and growing markets

ADVANTAGED global position as the industry’s best operator with expertise and innovation

DISCIPLINED capital allocation that supports value-driven growth
LEADING global portfolio of proven, flexible and focused businesses in large and growing markets

ADVANTAGED global position as the industry’s best operator with expertise and innovation

DISCIPLINED capital allocation that supports value-driven growth
LEADING AND FOCUSED PORTFOLIO

GROUPING OUR BUSINESS PORTFOLIO TO UNDERSCORE VALUE

INTEGRATED POLYMERS

EBITDA: $3.5 B

Olefins
Polyethylene
Polypropylene

PEERS
Dow, Westlake

TECHNOLOGY ENABLED PRODUCTS

EBITDA: $1.4 B

Technology
Advanced Polymer Solutions
Propylene Oxide & Derivatives

PEERS
Celanese, Eastman, Grace, PolyOne

INTERMEDIATES & FUELS

EBITDA: $1.0 B

Intermediate Chemicals
Oxyfuels & Related Products
Refining

PEERS
Celanese, Methanex, Trinseo, Valero

Note: EBITDA is as of LTM 2Q19.
RESILIENT PORTFOLIO

NATURAL HEDGES AND CYCLICAL OFFSETS DELIVER EARNINGS STABILITY

NATURAL HEDGES
Offsetting feedstocks in North America and Europe

CYCLICAL OFFSETS
High consumer-driven demand

[Graph showing EBITDA, GDP, Brent prices over years from 2014 to 3Q19 LTM]
STEADY EARNINGS IMPROVEMENT
THREE CONSECUTIVE QUARTERS OF EPS GROWTH

RESILIENT PROFITABILITY
Strong seasonal demand

INCREASING VALUE PER SHARE
Significant share repurchases in 3Q19

Note: 3Q19 results include a one time, non-cash tax benefit that increased earnings by $0.25 per share.
LEADING + ADVANTAGED + DISCIPLINED

LEADING global portfolio of proven, flexible and focused businesses in large and growing markets

ADVANTAGED global position as the industry’s best operator with expertise and innovation

DISCIPLINED capital allocation that supports value-driven growth
ADVANTAGED POSITION AS THE INDUSTRY’S BEST OPERATOR

CULTURE DRIVEN BY RELENTLESS BENCHMARKING AND CONTINUOUS IMPROVEMENT

SAFETY LEADERSHIP
OPERATIONAL EXCELLENCE
FEEDSTOCK FLEXIBILITY
COMMERCIAL EXCELLENCE
EXPERTISE AND INNOVATION
SAFETY LEADERSHIP

CONSISTENT FOCUS ON SAFETY

Injuries per 200,000 hours worked

- LyondellBasell
- ACC Top Quartile

Source: American Chemistry Council (ACC), LyondellBasell. 2019 ACC data not yet available.
Number of hours worked includes employees and contractors. Data includes safety performance from the acquisition of A. Schulman from August 21, 2018 forward.
DEMONSTRATED OPERATIONAL EXCELLENCE

BEST OPERATOR IN THE INDUSTRY WITH HIGH ASSET UTILIZATION AND LOW COSTS

HIGH ASSET UTILIZATION
- Consistent maintenance through the cycle
- Optimized turnaround planning
- Increased predictive maintenance
- Continuous process optimization

SUSTAINED COST DISCIPLINE
- 2.7% SG&A / Revenue

2018 OPERATING RATES

- ETHYLENE: 92%
- POLYMERS: 90%
- PROPYLENE OXIDE: 97%
- REFINING: 96%

Note: 2016-2018 average SG&A / revenue
SUPERIOR FEEDSTOCK FLEXIBILITY

ROBUST FEEDSTOCK OPTIMIZATION ENHANCES PROFITABILITY

GLOBAL CRACKER NETWORK

Full-range assets that utilize ethane, propane, butane, y-grade, naphtha, and other advantaged feeds

NORTH AMERICA

Maximizing value through advantaged feeds in both the U.S. Gulf Coast and Midwest markets

EUROPE

Capability to run ~ 50% advantaged non-naphtha feedstocks such as propane, butane, condensates, refinery gas and hydrowax

Ethylene Production

- Full-range
- Ethane/Propane
- Ethane
- Naphtha

LyondellBasell North America
Industry North America
LyondellBasell Europe
Industry Europe
EXPERTISE AND INNOVATION

OUR PRODUCTS AND TECHNOLOGIES HAVE DRIVEN GROWTH IN THE PETROCHEMICAL INDUSTRY FOR 65+ YEARS

- Zeigler and Natta breakthroughs in PE and PP
- Introduced Hostalen HDPE process
- Commercialized our proprietary PO/TBA process
- Launched our proprietary PO/SM process
- Introduced Spheripol, the most widely-used polyolefins process
- Developed Catalloy process technology for advanced resins
- Introduced Spherizone PP process technology
- Partnered with SUEZ to create Quality Circular Polymers (QCP)
- Start-up of first world-scale Hyperzone HDPE plant
- 1953-1954
- 1955
- 1969
- 1973
- 1982
- 1990
- 2002
- 2018
- 2019
ADVANCING SUSTAINABILITY

SERVING CUSTOMER NEEDS AND ADDRESSING SOCIETAL DEMANDS

SUSTAINABLE AND CIRCULAR PRODUCTS
Advancing sustainable technologies to create profitable business opportunities

PLASTIC WASTE IN THE ENVIRONMENT
Developing and deploying meaningful solutions through our leadership in the Alliance to End Plastic Waste

CLIMATE CHANGE
Targeting a 15% reduction in CO₂ equivalent emissions per ton of product by 2030

16
LEADING + ADVANTAGED + DISCIPLINED

LEADING global portfolio of proven, flexible and focused businesses in large and growing markets

ADVANTAGED global position as the industry’s best operator with expertise and innovation

DISCIPLINED capital allocation that supports value-driven growth
DISCIPLINED CAPITAL ALLOCATION

CLEAR FRAMEWORK THAT SUPPORTS VALUE CREATION AND SHAREHOLDER REMUNERATION

- **DIVIDEND**
  - Committed to a strong and progressive dividend

- **SUSTAINING & GROWTH CAPEX**
  - Capital investments to sustain and expand our assets

- **INORGANIC INVESTMENTS & SHARE REPURCHASES**
  - Value-minded inorganic growth
  - Return surplus cash through share repurchases

Note: Sustaining CAPEX is maintenance and HSE capital expenditures.
PIPELINE OF ORGANIC GROWTH

FOCUS ON TARGETED MID-SIZED AND HIGH-RETURN INVESTMENTS

RECENT EXPANSIONS
2013-2019
- U.S. Ethylene 1,000 KT
- Polyethylene 210 KT
- Polypropylene 120 KT
- PP Compounds 120 KT

CURRENT PROJECTS
2019-2021
- *Hyperzone* PE 500 KT
- PO/TBA 470/1,000 KT

FUTURE INVESTMENTS
2024+
- U.S. Ethylene 250 KT
- *Hyperzone* PE 500 KT
- *Spherizone* PP 500 KT
HYPERZONE PE UPDATE
A NEW PLATFORM FOR GROWTH

INVESTMENT STRATEGY

● Delivering the latest generation of LyondellBasell polymer technology
● Providing lightweight, crack-resistant polymers with high processability
● Enabling the production of cost-effective and durable plastics

CURRENT STATUS

● Commissioning underway
● Beneficial production expected 1Q 2020

Note: Estimated EBITDA is nameplate capacity multiplied by 2014-2018 average industry cash margin which may not be representative of our actual margin.

500 KT
HDPE per year

$170-210 MM
ESTIMATED EBITDA per year
PO/TBA PLANT UPDATE

DISCIPLINED GROWTH MEETING GLOBAL DEMAND

INVESTMENT STRATEGY

- Meeting rising demand for urethanes and clean-burning oxyfuels
- Capturing cost-advantaged U.S. Gulf Coast feedstocks

PROJECT MILESTONES AND PLAN

- Broke ground August 2018
- 20% construction completion as of September 2019
- Large equipment deliveries underway
- Planned start 2H 2021

Note: Estimated EBITDA is nameplate capacity multiplied by 2014-2018 average industry cash margins which may not be representative of our actual margins.
MODERATING CAPITAL EXPENDITURE PROFILE

COMPLETION OF HYPERZONE AND PO/TBA WILL INCREASE FREE CASH FLOW

<table>
<thead>
<tr>
<th>Year</th>
<th>Sustaining CAPEX</th>
<th>Growth CAPEX</th>
<th>Total CAPEX</th>
<th>USD, billions</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013-17 Avg</td>
<td>1.2</td>
<td>1.8</td>
<td></td>
<td>3.0</td>
</tr>
<tr>
<td>2018</td>
<td>1.3</td>
<td>1.7</td>
<td>1.9</td>
<td>3.0</td>
</tr>
<tr>
<td>2019F</td>
<td>1.3</td>
<td>1.7</td>
<td>2.0</td>
<td>3.0</td>
</tr>
<tr>
<td>2020F</td>
<td>1.3</td>
<td>1.7</td>
<td>2.0</td>
<td>3.0</td>
</tr>
<tr>
<td>2021F</td>
<td>1.3</td>
<td>1.7</td>
<td>2.0</td>
<td>3.0</td>
</tr>
<tr>
<td>2022F</td>
<td>1.3</td>
<td>1.7</td>
<td>2.0</td>
<td>3.0</td>
</tr>
</tbody>
</table>

1. **2013-2017 INVESTMENTS**
   - High-return debottlenecks

2. **NEAR-TERM GROWTH INVESTMENTS**
   - *Hyperzone* PE and PO/TBA are the largest investment from 2018 to 2021

3. **MODEST CAPEX FORECAST**
   - Highly focused, mid-sized projects
   - Total CAPEX stepping down to $1.9 B by 2022

Note: Sustaining CAPEX is maintenance and HSE capital expenditures.
NEW CHINA JOINT VENTURE
HIGH-RETURN PROJECT IN THE FASTEST-GROWING MARKET

MOU WITH LIAONING BORA ENTERPRISE GROUP

ADVANTAGES

● Serving Chinese domestic market through LyondellBasell marketing network
● Expanding our global network using LyondellBasell technology and catalysts
● Flexible feedstock sourced from partner’s adjacent world scale refinery
● Local partner with proven construction capabilities
● Overall construction ~50% complete

50/50 INTEGRATED CRACKER INVESTMENT

● 1.1 million mt flexible naphtha / LPG cracker with 800 KT PE and 600 KT PP
● Low total project costs ~$2.6 billion: 50-60% of USGC, EU or Middle East
● Low equity requirement with ~2/3 project debt financing
INVESTMENTS DRIVING GROWTH AND VALUE
FOCUSED, HIGH-RETURN INVESTMENTS DRIVING EBITDA GROWTH

SMALL-MEDIUM PROJECTS
(>150 Projects)
- Polypropylene debottlenecks
- Energy-saving initiatives
- New capacity for compounds and catalysts

MAJOR PROJECTS
- Hyperzone PE
- PO/TBA

Note: Estimated EBITDA for projects is volume multiplied by 2014-2018 average cash margins.
DELIVERING HIGHER FREE CASH FLOW

HIGHER EBITDA AND LOWER CAPEX INCREASE FREE CASH FLOW IN 2022 OVER 2019

Higher EBITDA from Investments: $1.3 B

Higher Cash From Operating Activities Yield from EBITDA: 80%

Higher Cash From Operating Activities: $1.0 B

Lower CAPEX: $1.1 B

Higher Free Cash Flow: $2.1 B

NOTE: 80% Cash from operating activities yield from EBITDA is the annual average of 2016-2018.
LEADING + ADVANTAGED + DISCIPLINED

WELL-POSITIONED TO ENHANCE VALUE CREATION

RESILIENT
FOCUSED
PORTFOLIO

Integrated Polymers
Technology Enabled Products
Intermediates & Fuels

LEADING
ADVANTAGED
POSITIONS

Best Operator
Attractive Products/Markets
Feedstock Advantages
Culture of Innovation

DISCIPLINED
FINANCIAL
POLICIES

Efficient Cash Generation
Secure, Progressive Dividend
Committed to Strong Investment Grade

TANGIBLE
GROWTH
AHEAD

Small-Medium Projects
Major Projects
Joint Ventures
Selective M&A
INFORMATION RELATED TO FINANCIAL MEASURES

This presentation makes reference to certain "non-GAAP" financial measures as defined in Regulation G of the U.S. Securities Exchange Act of 1934, as amended. We report our financial results in accordance with U.S. generally accepted accounting principles, but believe that certain non-GAAP financial measures, such as EBITDA and certain liquidity measures provide useful supplemental information to investors regarding the underlying business trends and performance of the company’s ongoing operations and are useful for period-over-period comparisons of such operations. Non-GAAP financial measures should be considered as a supplement to, and not as a substitute for, or superior to, the financial measures prepared in accordance with GAAP.

EBITDA, as presented herein, may not be comparable to a similarly titled measure reported by other companies due to differences in the way the measure is calculated. We calculate EBITDA as income from continuing operations plus interest expense (net), provision for (benefit from) income taxes, and depreciation & amortization. EBITDA should not be considered an alternative to profit or operating profit for any period as an indicator of our performance, or as an alternative to operating cash flows as a measure of our liquidity. Estimated EBITDA, as presented for future projects is calculated as volume multiplied by average historical margins. Estimated EBITDA cannot be reconciled to net income due to the inherent difficulty in forecasting and quantifying certain amounts that are necessary for such reconciliation, including adjustments that could be made for interest expense (net), provision for (benefit from) income taxes, depreciation & amortization and other changes reflected in the reconciliation of historical numbers, the amounts of which, based on historical experience, could be significant.

Cash from operations yield from EBITDA is a measure that provides an indicator of a company’s operational efficiency and management. Cash from operations yield from EBITDA, as presented herein, may not be comparable to similarly titled measures reported by other companies due to differences in the way the measures are calculated. For purposes of this presentation, cash from operating activities yield from EBITDA means cash from operating activities divided by EBITDA.

Free cash flow and free operating cash flow yield (FOCF Yield) are measures of profitability commonly used by investors to evaluate performance. Free cash flow and free operating cash flow yield, as presented herein, may not be comparable to similarly titled measures reported by other companies due to differences in the way the measures are calculated. For purposes of this presentation, free cash flow means net cash provided by operating activities minus capital expenditures. Free operating cash flow yield means the ratio of free operating cash flow to market capitalization where free operating cash flow means net cash provided by operating activities minus sustaining (maintenance and HSE) capital expenditures.
Reconciliation of Net Income to EBITDA

<table>
<thead>
<tr>
<th></th>
<th>For the Years Ended December 31</th>
<th>Six Months Ended</th>
<th>Last Twelve Months Ended</th>
<th>Nine Months Ended</th>
<th>Last Twelve Months Ended</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net income</td>
<td>$4,168</td>
<td>$4,474</td>
<td>$3,837</td>
<td>$4,690</td>
<td>$2,885</td>
</tr>
<tr>
<td>Loss from discontinued operations</td>
<td>4</td>
<td>5</td>
<td>10</td>
<td>18</td>
<td>8</td>
</tr>
<tr>
<td>Income from continuing operations</td>
<td>4,172</td>
<td>4,479</td>
<td>3,847</td>
<td>4,698</td>
<td>2,886</td>
</tr>
<tr>
<td>Provision for income taxes</td>
<td>1,540</td>
<td>1,730</td>
<td>1,386</td>
<td>598</td>
<td>282</td>
</tr>
<tr>
<td>Depreciation and amortization</td>
<td>1,019</td>
<td>1,047</td>
<td>1,064</td>
<td>1,241</td>
<td>599</td>
</tr>
<tr>
<td>Interest expense, net</td>
<td>319</td>
<td>277</td>
<td>305</td>
<td>467</td>
<td>315</td>
</tr>
<tr>
<td>EBITDA</td>
<td>$7,050</td>
<td>$7,533</td>
<td>$6,602</td>
<td>$7,134</td>
<td>$6,867</td>
</tr>
</tbody>
</table>

Note: Last twelve months June 30, 2019 is calculated as year ended December 31, 2018 plus six months ended June 30, 2019 and minus six months ended June 30, 2018. Last twelve months September 30, 2019 is calculated as year ended December 31, 2018 plus nine months ended September 30, 2019 and minus nine months ended September 30, 2018.
## Cash from Operating Activities Yield from EBITDA

<table>
<thead>
<tr>
<th>In Millions of Dollars</th>
<th>For the Years Ended December 31,</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2016</td>
</tr>
<tr>
<td>Cash flows from operating activities</td>
<td>$5,606</td>
</tr>
<tr>
<td>EBITDA</td>
<td>6,602</td>
</tr>
<tr>
<td>Cash from operating activities yield from EBITDA</td>
<td>85%</td>
</tr>
</tbody>
</table>

Approximate average (2016-2018) 80%
<table>
<thead>
<tr>
<th></th>
<th>For the Year Ended</th>
<th>Nine Months Ended</th>
<th>Last Twelve Months Ended</th>
</tr>
</thead>
<tbody>
<tr>
<td>In Millions of dollars</td>
<td>December 31, 2018</td>
<td>September 30, 2018</td>
<td>September 30, 2019</td>
</tr>
<tr>
<td>Olefins &amp; Polyolefins - Americas</td>
<td>$ 2,762</td>
<td>$ 2,131</td>
<td>$ 1,804</td>
</tr>
<tr>
<td>Olefins &amp; Polyolefins - EAI</td>
<td>1,163</td>
<td>1,036</td>
<td>918</td>
</tr>
<tr>
<td>Intermediates &amp; Derivatives</td>
<td>2,011</td>
<td>1,632</td>
<td>1,228</td>
</tr>
<tr>
<td>Advanced Polymer Solutions</td>
<td>400</td>
<td>314</td>
<td>370</td>
</tr>
<tr>
<td>Refining</td>
<td>167</td>
<td>251</td>
<td>(87)</td>
</tr>
<tr>
<td>Technology</td>
<td>328</td>
<td>267</td>
<td>273</td>
</tr>
<tr>
<td>Other</td>
<td>36</td>
<td>24</td>
<td>14</td>
</tr>
<tr>
<td>Continuing Operations</td>
<td>$ 6,867</td>
<td>$ 5,655</td>
<td>$ 4,520</td>
</tr>
</tbody>
</table>
## EBITDA by Reporting Segment to EBITDA by Platform - Last Twelve Months Ended June 30, 2019

### EBITDA by Reporting Segment

<table>
<thead>
<tr>
<th>Segment</th>
<th>For the Year Ended December 31, 2018</th>
<th>Six Months Ended June 30, 2018</th>
<th>Last Twelve Months Ended June 30, 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Olefins &amp; Polylefins - Americas</td>
<td>$2.8</td>
<td>$1.4</td>
<td>$1.1</td>
</tr>
<tr>
<td>Olefins &amp; Polylefins - EAI</td>
<td>$1.2</td>
<td>0.8</td>
<td>0.6</td>
</tr>
<tr>
<td>Intermediates &amp; Derivatives: (a)</td>
<td>$2.0</td>
<td>1.1</td>
<td>0.8</td>
</tr>
<tr>
<td>Intermediates &amp; Derivatives - PO &amp; Derivatives (a)</td>
<td>$0.7</td>
<td>0.4</td>
<td>0.3</td>
</tr>
<tr>
<td>Intermediates &amp; Derivatives - Intermediate Chemicals, Oxyfuels &amp; Related Products (a)</td>
<td>$1.3</td>
<td>0.7</td>
<td>0.5</td>
</tr>
<tr>
<td>Advanced Polymer Solutions</td>
<td>$0.4</td>
<td>0.2</td>
<td>0.3</td>
</tr>
<tr>
<td>Refining</td>
<td>$0.2</td>
<td>0.2</td>
<td>0.1</td>
</tr>
<tr>
<td>Technology</td>
<td>$0.3</td>
<td>0.2</td>
<td>0.3</td>
</tr>
<tr>
<td>Other</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

### EBITDA by Platform

<table>
<thead>
<tr>
<th>Segment</th>
<th>Last Twelve Months Ended June 30, 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Integrated Polymers</td>
<td>$2.5</td>
</tr>
<tr>
<td>Technology Enabled Products</td>
<td>1.0</td>
</tr>
<tr>
<td>Intermediates &amp; Fuels</td>
<td>1.0</td>
</tr>
<tr>
<td>Other Segment</td>
<td>1.1</td>
</tr>
<tr>
<td>Total Continuing Operations</td>
<td>6.0</td>
</tr>
</tbody>
</table>

(a) In the Platform analysis, Intermediates & Derivatives Segment is divided by PO & Derivatives product line and Intermediate Chemicals, Oxyfuels and Related Products product lines.
## Calculation of Free Operating Cash Flow Yield

<table>
<thead>
<tr>
<th>Last Twelve Months</th>
<th>September 30, 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>In Millions of Dollars (except share data)</strong></td>
<td></td>
</tr>
<tr>
<td>Net cash provided by operating activities</td>
<td>$ 5,016</td>
</tr>
<tr>
<td>Less: Sustaining (maintenance and HSE) capital expenditures</td>
<td>$ 1,071</td>
</tr>
<tr>
<td>Free operating cash flow</td>
<td>$ 3,945</td>
</tr>
</tbody>
</table>

Divided by:

<table>
<thead>
<tr>
<th>Market capital:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Common stock outstanding</td>
<td>333,407,876</td>
</tr>
<tr>
<td>Closing share price, end of period</td>
<td>$ 89.47</td>
</tr>
<tr>
<td>Market capital</td>
<td>$ 29,830</td>
</tr>
</tbody>
</table>

Free operating cash flow yield | 13.2%
Calculation of Selling, general and administrative expenses (SG&A) as a percent of revenue

<table>
<thead>
<tr>
<th>In Millions of Dollars</th>
<th>December 31,</th>
<th>Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>SG&amp;A</td>
<td>$ 833</td>
<td>$ 859</td>
</tr>
<tr>
<td>Revenue</td>
<td>29,183</td>
<td>34,484</td>
</tr>
<tr>
<td>SG&amp;A as a percentage of revenue</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Calculation of LYB Return on Invested Capital (ROIC)

#### In Million of Dollars

<table>
<thead>
<tr>
<th></th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Income from continuing operations</td>
<td>$4,479</td>
<td>$3,847</td>
<td>$4,895</td>
<td>$4,698</td>
<td></td>
</tr>
<tr>
<td>Less:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tax benefit due to change in tax law from U.S. Tax Cuts and Jobs Act</td>
<td>819</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non-cash tax settlement (2Q18)</td>
<td>346</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Add:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interest expense, net</td>
<td>277</td>
<td>305</td>
<td>467</td>
<td>315</td>
<td></td>
</tr>
<tr>
<td>Effective tax rate (excluding tax benefits)</td>
<td>27.9%</td>
<td>26.5%</td>
<td>25.8%</td>
<td>18%</td>
<td></td>
</tr>
<tr>
<td>Interest expense, net, after tax</td>
<td>200</td>
<td>224</td>
<td>347</td>
<td>258</td>
<td></td>
</tr>
<tr>
<td>Adjusted income from continuing operations</td>
<td>4,679</td>
<td>4,071</td>
<td>4,423</td>
<td>4,610</td>
<td></td>
</tr>
<tr>
<td>Divided by:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Average invested capital:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Property, plant &amp; equipment, net</td>
<td>8,758</td>
<td>8,991</td>
<td>10,137</td>
<td>10,997</td>
<td>12,477</td>
</tr>
<tr>
<td>Current assets</td>
<td>11,645</td>
<td>9,789</td>
<td>9,599</td>
<td>11,738</td>
<td>10,566</td>
</tr>
<tr>
<td>Less:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Current liabilities</td>
<td>5,437</td>
<td>4,349</td>
<td>4,540</td>
<td>4,777</td>
<td>5,513</td>
</tr>
<tr>
<td>Cash and cash equivalents</td>
<td>1,031</td>
<td>924</td>
<td>875</td>
<td>1,523</td>
<td>332</td>
</tr>
<tr>
<td>Average invested capital</td>
<td>$13,721</td>
<td>$13,914</td>
<td>$15,378</td>
<td>$16,817</td>
<td></td>
</tr>
<tr>
<td>Return on invested capital</td>
<td>34%</td>
<td>29%</td>
<td>29%</td>
<td>27%</td>
<td></td>
</tr>
<tr>
<td>Average (2015-2018)</td>
<td>30%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
# Calculation of Capital Expenditures

<table>
<thead>
<tr>
<th>In Millions of Dollars</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sustaining CAPEX</td>
<td>$825</td>
<td>$706</td>
<td>$815</td>
<td>$1,109</td>
<td>$1,019</td>
<td>$1,052</td>
</tr>
<tr>
<td>Growth CAPEX</td>
<td>736</td>
<td>793</td>
<td>625</td>
<td>1,134</td>
<td>528</td>
<td>1,053</td>
</tr>
<tr>
<td>Expenditures for property, plant and equipment</td>
<td>$1,561</td>
<td>$1,499</td>
<td>$1,440</td>
<td>$2,243</td>
<td>$1,547</td>
<td>$2,105</td>
</tr>
</tbody>
</table>

Average Sustaining CAPEX (2013-2017) $895
Average Growth CAPEX (2013-2017) $763

Growth CAPEX (2015-2018) $3,340