# MORGAN STANLEY'S GLOBAL CHEMICALS AND AGRICULTURE CONFERENCE





## **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

\$35 B REVENUE LTM 3Q19

19,500 EMPLOYEES 2018

MANUFACTURING SITES & JOINT VENTURES IN

24 COUNTRIES

SALES IN

>100

**COUNTRIES** 

## 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

LDIT D/\ LTW	
Olefins & Polyolefins – Americas	\$2,435 MM
Olefins & Polyolefins – Europe, Asia, In	ternational \$1,045 MM
Intermediates & Derivatives	\$1,607 MM
Advanced Polymer Solutions	\$456 MM
Refining	-\$171 MM
Technology	\$334 MM



### **COMPELLING INVESTMENT THESIS**

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



## LEADING + ADVANTAGED + DISCIPLINED



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



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**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

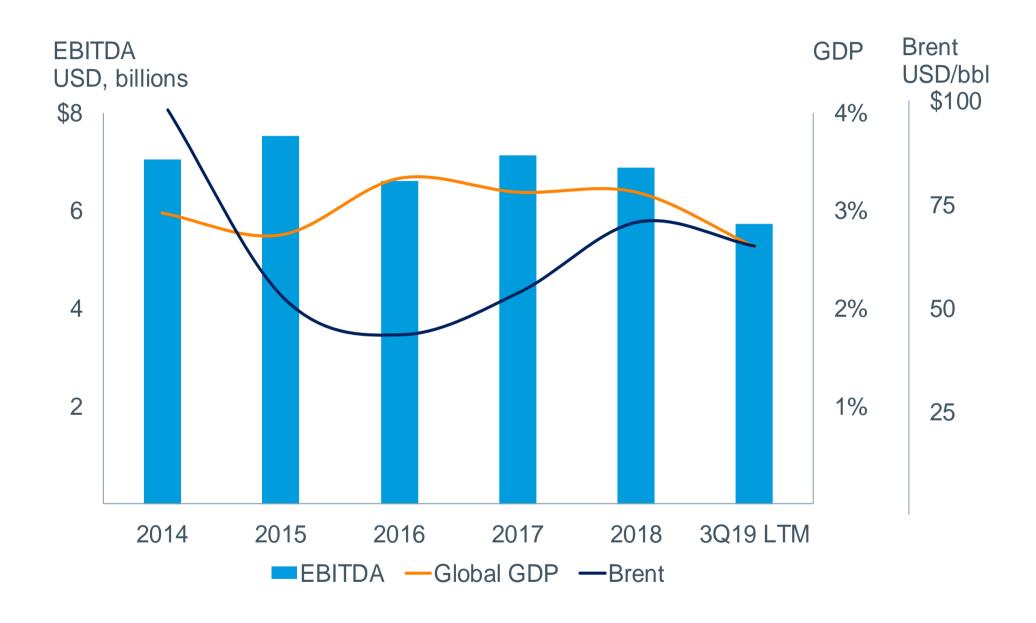
#### **PEERS**

Celanese, Methanex, Trinseo, Valero



## RESILIENT PORTFOLIO

#### NATURAL HEDGES AND CYCLICAL OFFSETS DELIVER EARNINGS STABILITY



#### **NATURAL HEDGES**

Offsetting feedstocks in North America and Europe

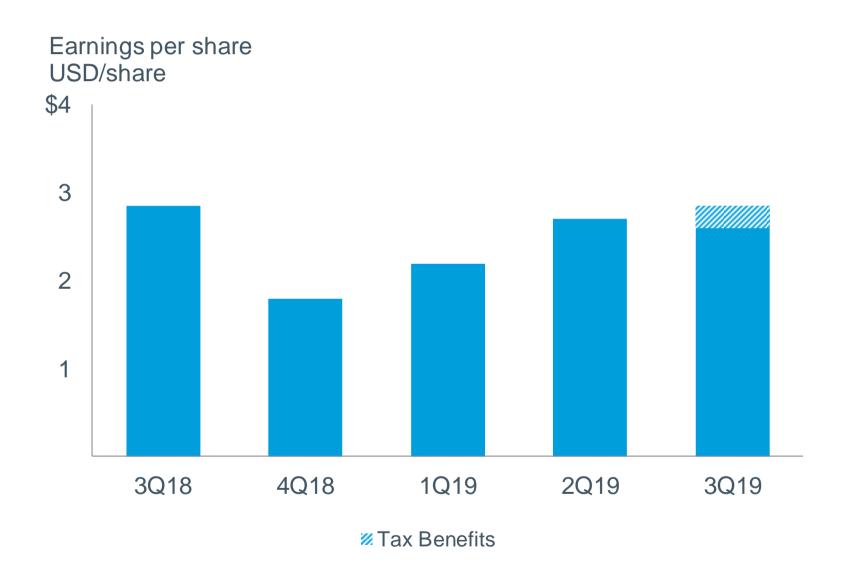
#### **CYCLICAL OFFSETS**

High consumer-driven demand



## STEADY EARNINGS IMPROVEMENT

#### THREE CONSECUTIVE QUARTERS OF EPS GROWTH



#### **RESILIENT PROFITABILITY**

Strong seasonal demand

#### **INCREASING VALUE PER SHARE**

Significant share repurchases in 3Q19



## 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



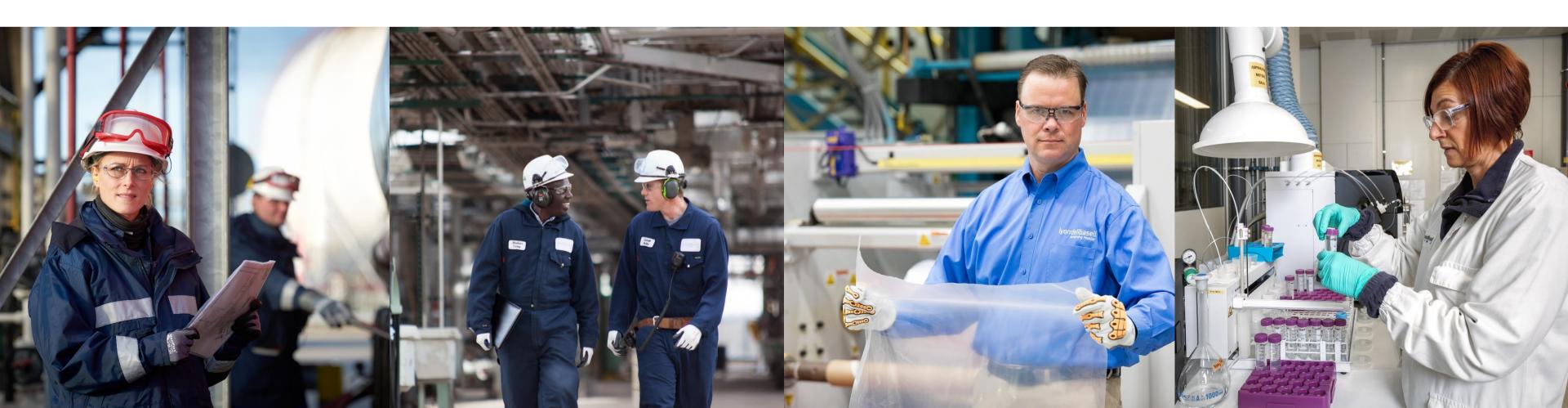
FEEDSTOCK FLEXIBILITY



COMMERCIAL EXCELLENCE



**EXPERTISE AND INNOVATION** 





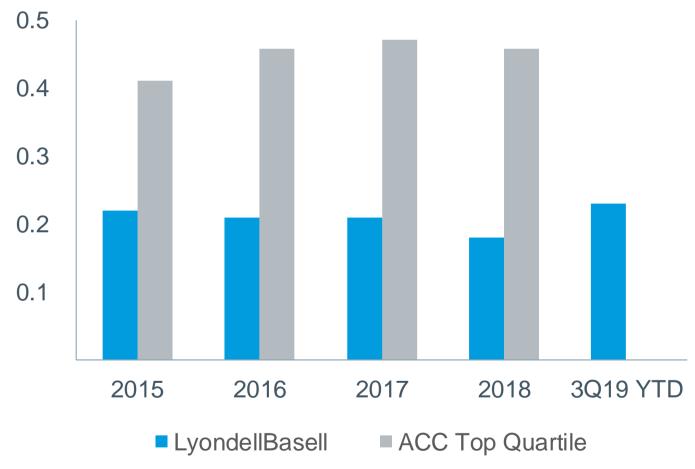




## SAFETY LEADERSHIP

#### **CONSISTENT FOCUS ON SAFETY**







## DEMONSTRATED OPERATIONAL EXCELLENCE

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

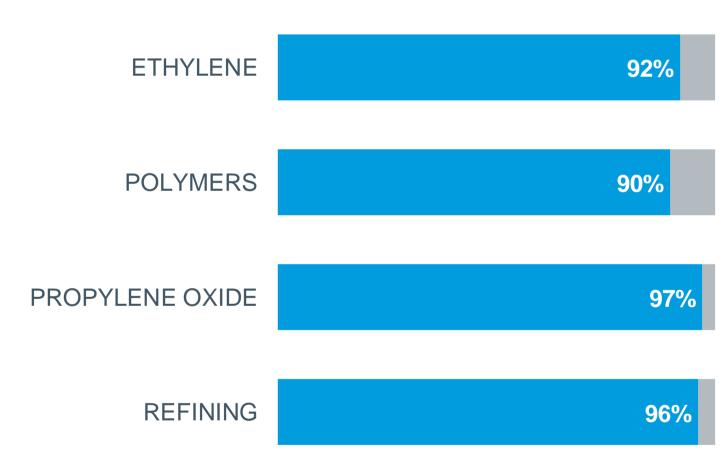
#### **HIGH ASSET UTILIZATION**

- 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**





## SUPERIOR FEEDSTOCK FLEXIBILITY

#### ROBUST FEEDSTOCK OPTIMIZATION ENHANCES PROFITABILITY

#### **GLOBAL CRACKER NETWORK**

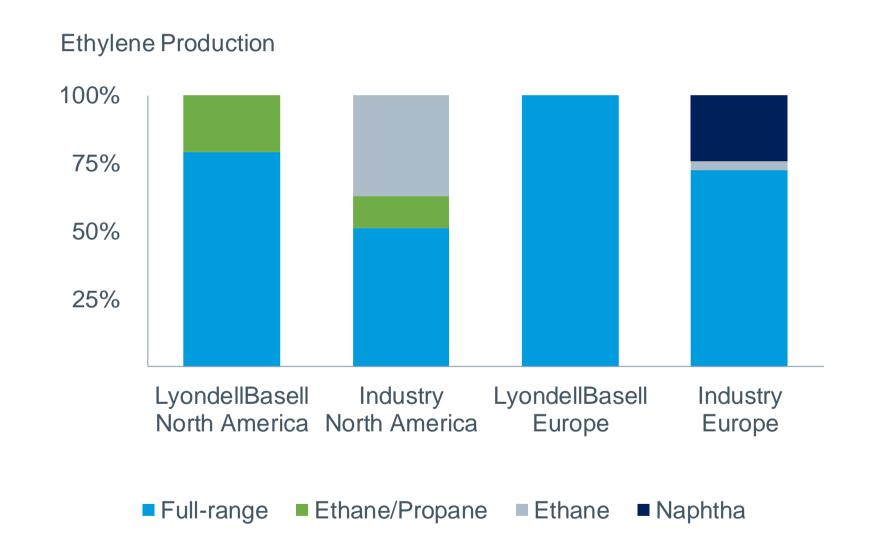
Full-range assets that utilize ethane, propane, butane, y-grade, naphtha, and other advantaged feeds

#### **NORTH AMERICA**

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

#### **EUROPE**

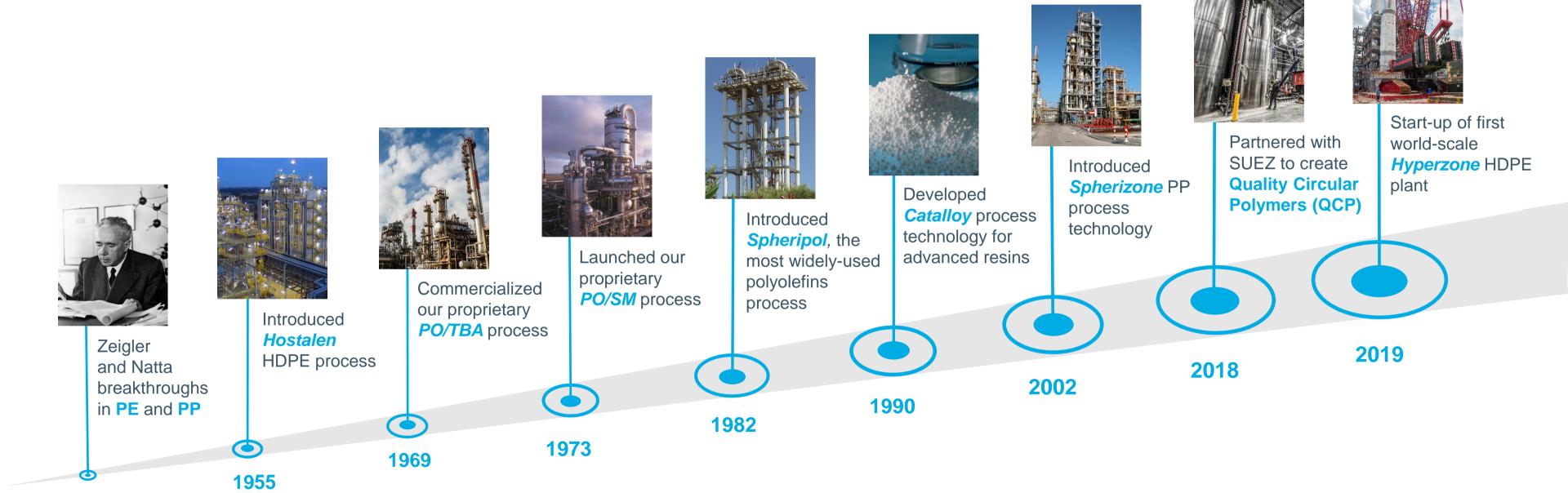
Capability to run ~ 50 % advantaged non-naphtha feedstocks such as propane, butane, condensates, refinery gas and hydrowax





## **EXPERTISE AND INNOVATION**

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



15

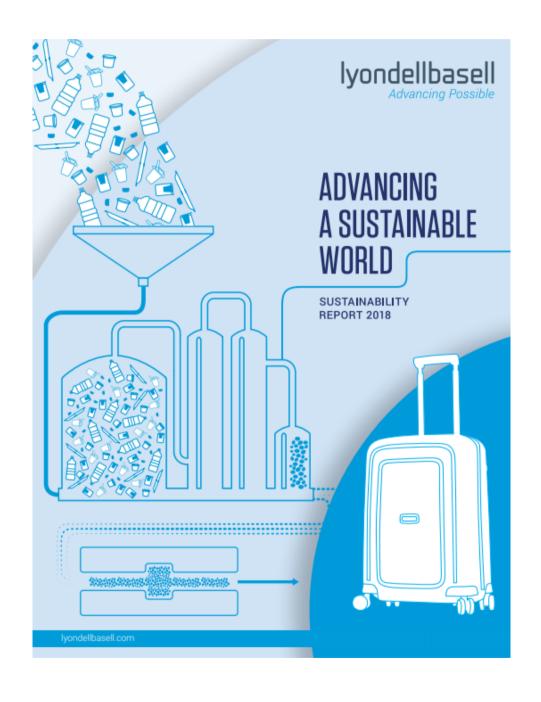
1953-1954

lyondellbasell

Advancing Possible

## **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 CO<sub>2</sub> equivalent emissions per ton of product by 2030



## 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

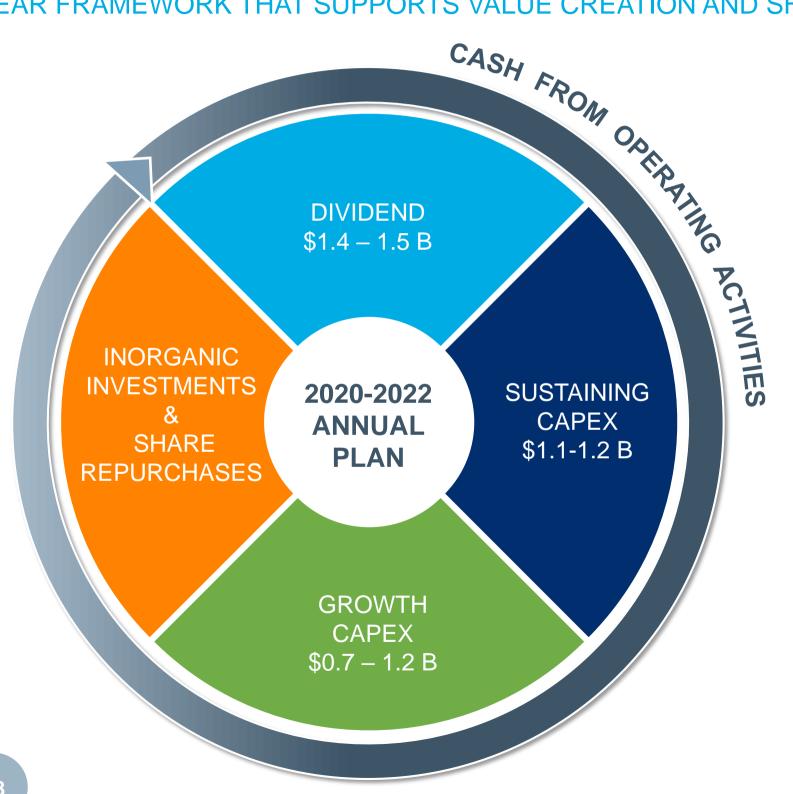


**DISCIPLINED** capital allocation that supports value-driven growth



## **DISCIPLINED CAPITAL ALLOCATION**

#### CLEAR FRAMEWORK THAT SUPPORTS VALUE CREATION AND SHAREHOLDER REMUNERATION



1 DIVIDEND

Committed to a strong and progressive dividend

2 SUSTAINING & GROWTH CAPEX

Capital investments to sustain and expand our assets

3 INORGANIC INVESTMENTS & SHARE REPURCHASES

Value-minded inorganic growth

Return surplus cash through share repurchases

Committed to **Strong Investment Grade Rating** 

Iyondellbasell

Advancing Possible

## 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

500 KT

**HDPE** per year



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

## 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



470/1,000 KT

PO/TBA

per year

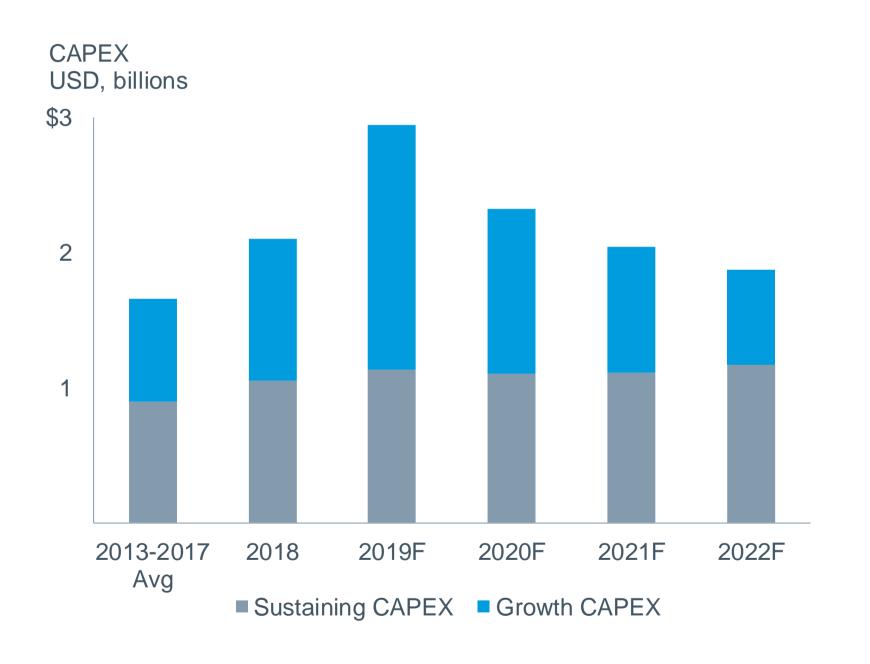
\$400-450 MM

**ESTIMATED EBITDA** 

per year

## MODERATING CAPITAL EXPENDITURE PROFILE

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



- 1 2013-2017 INVESTMENTS
  High-return debottlenecks
- NEAR-TERM GROWTH INVESTMENTS

  Hyperzone PE and PO/TBA are the largest investment from 2018 to 2021
- MODEST CAPEX FORECAST

  Highly focused, mid-sized projects

  Total CAPEX stepping down to \$1.9 B by 2022



## **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

50 / 50

**Joint Venture** 



## INVESTMENTS DRIVING GROWTH AND VALUE

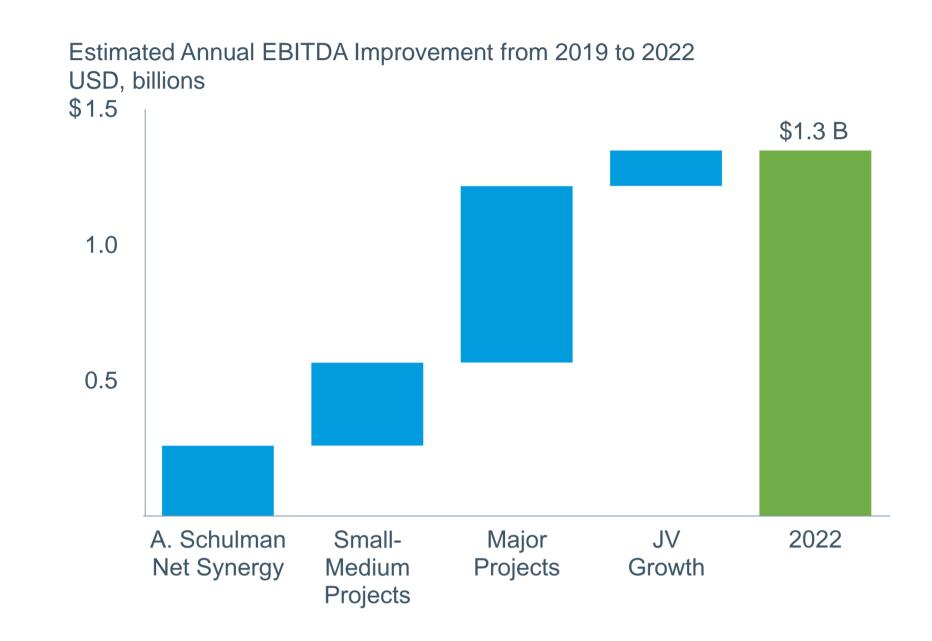
#### FOCUSED, HIGH-RETURN INVESTMENTS DRIVING EBITDA GROWTH

## SMALL-MEDIUM PROJECTS (>150 Projects)

- Polypropylene debottlenecks
- Energy-saving initiatives
- New capacity for compounds and catalysts

#### **MAJOR PROJECTS**

- Hyperzone PE
- PO/TBA





## DELIVERING HIGHER FREE CASH FLOW

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

\$1.3 B

Higher EBITDA from Investments

X

80%

Cash From Operating
Activities Yield from EBITDA

\$1.0 B

Higher Cash From Operating Activities

+

\$1.1 B

Lower CAPEX

\$2.1 B

Higher Free Cash Flow



## 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



## APPENDIX



## 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**

						Last Twelve Six Months Ended Months Ended Nine Months Ended							nded		ast Twelve nths Ended	
		For the Years Ended December 31,					_Ju	ıne 30,		June 30,	Sep	tember 30,	Sep	tember 30,	Se	ptember 30,
In Millions of Dollars	2014	2015	2016	2017	2018	2018		2019		2019		2018		2019		2019
Net income	\$ 4,168	\$ 4,474	\$ 3,837	\$ 4,877	\$ 4,690	\$ 2,885	\$	1,820	\$	3,625	\$	3,998	\$	2,785	\$	3,477
Loss from discontinued operations	4	5	10	18	8	1		3		10		3		7		12
Income from continuing operations	4,172	4,479	3,847	4,895	4,698	2,886		1,823		3,635		4,001		2,792		3,489
Provision for income taxes	1,540	1,730	1,386	598	613	282		372		703		514		508		607
Depreciation and amortization	1,019	1,047	1,064	1,174	1,241	599		650		1,292		908		977		1,310
Interest expense, net	319	277	305	467	315	156		162		321		232		243		326
EBITDA	\$ 7,050	\$ 7,533	\$ 6,602	\$ 7,134	\$ 6,867	\$ 3,923	\$	3,007	\$	5,951	\$	5,655	\$	4,520	\$	5,732

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**

	For the Years Ended December 31,										
In Millions of Dollars		2016				2018					
Cash flows from operating activities	\$	5,606	\$	5,206	\$	5,471					
EBITDA		6,602		7,134		6,867					
Cash from operating activities yield from EBITDA		85%		73%		80%					
Approximate average (2016-2018)						80%					



**EBITDA by Reporting Segments** 

	EBITDA by Reporting Segment											
		the Year					Last	Twelve				
	E	inded		Nine Mon	ths End	ded	<b>Months Ended</b>					
	December 31,		Septmeber 30,		September 30,		Septe	ember 30,				
In Millions of dollars	2018		2018		2019		2019					
Olefins & Polyolefins - Americas	\$	2,762	\$	2,131	\$	1,804	\$	2,435				
Olefins & Polyolefins - EAI		1,163		1,036		918		1,045				
Intermediates & Derivatives		2,011		1,632		1,228		1,607				
Advanced Polymer Solutions		400		314		370		456				
Refining		167		251		(87)		(171)				
Technology		328		267		273		334				
Other		36		24		14		26				
Continuing Operations	\$	6,867	\$	5,655	\$	4,520	\$	5,732				



EBITDA by Reporting Segment to EBITDA by Platform - Last Twelve Months Ended June 30, 2019

		EB	ITDA by Rep	ortir	ng Segment					E	<b>BITDA by Platfor</b>	m				
						Las	st Twelve	<u> </u>								
	For the Yea	ır				N	<b>l</b> onths									
	Ended		Six Mor	nths	Ended	I	Ended			Last	Twelve Months E	nded				
	December 3	1,	June 30,		June 30,	J	une 30,				June 30,					
In Billions of dollars	2018		2018		2019 20		2019	2019								
								Inte	egrated	Technology	Intermediates	Other	Total			
								Ро	lymers	<b>Enabled</b>	& Fuels	Segment	Continuing			
										<b>Products</b>			Operations			
Olefins & Polyolefins - Americas	\$ 2	2.8	\$ 1.4	\$	1.1	\$	2.5	\$	2.5				\$ 2.5			
Olefins & Polyolefins - EAI	•	1.2	8.0		0.6		1.0		1.0				1.0			
Intermediates & Derivatives: (a)	2	2.0	1.1		0.8		1.7						1.7			
Intermediates & Derivatives - PO & Derivatives (a)	(	0.7	0.4		0.3		0.6			0.6			0.6			
Intermediates & Derivatives - Intermediate Chemicals,																
Oxyfuels & Related Products (a)		1.3	0.7		0.5		1.1				1.1		1.1			
Advanced Polymer Solutions		0.4	0.2		0.3		0.5			0.5			0.5			
Refining		0.2	0.2		(0.1)		(0.1)				(0.1)		(0.1)			
Technology	(	0.3	0.2		0.2		0.3			0.3	, ,		0.3			
Other		-	-		0.1		0.1					0.1	0.1			
Continuing Operations	(	5.9	3.9		3.0		6.0	\$	3.5	\$ 1.4	\$ 1.0	\$ 0.1	\$ 6.0			

<sup>(</sup>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**

	Last Twelve Months					
	September 30,					
In Millions of Dollars (except share data)		2019				
Net cash provided by operating activities	\$	5,016				
Less:						
Sustaining (maintenance and HSE) capital expenditures		1,071				
Free operating cash flow	\$	3,945				
Divided by:						
Market capital:						
Common stock outstanding	3	33,407,876				
Closing share price, end of period	\$	89.47				
Market capital	\$	29,830				
Free operating cash flow yield		13.2%				



#### Calculation of Selling, general and administrative expenses (SG&A) as a percent of revenue

		Average			
In Millions of Dollars	2016	2017	2018	(2016-2018)	
SG&A	\$ 833	\$ 859	\$ 1,129	\$ 940	
Revenue	29,183	34,484	39,004	34,224	
SG&A as a percentage of revenue				2.7%	



#### Calculation of LYB Return on Invested Capital (ROIC)

	,			
2014	2015	2016	2017	2018
	\$ 4,479	\$ 3,847	\$ 4,895	\$ 4,698
Act			819	
				346
	277	305	467	315
	27.9%	26.5%	25.8%	18%
	200	224	347	258
	4,679	4,071	4,423	4,610
8,758	8,991	10,137	10,997	12,477
11,645	9,789	9,599	11,738	10,566
5,437	4,349	4,540	4,777	5,513
1,031	924	875	1,523	332
13,935	13,507	14,321	16,435	17,198
	\$ 13,721	\$ 13,914	\$ 15,378	\$ 16,817
	34%	29%	29%	27%
				30%
	2014 Act  8,758 11,645 5,437 1,031	2014     2015       \$ 4,479       Act       277       27.9%       200       4,679       8,758     8,991       11,645     9,789       5,437     4,349       1,031     924       13,935     13,507       \$ 13,721	2014     2015     2016       \$ 4,479     \$ 3,847       Act     277     305       27.9%     26.5%       200     224       4,679     4,071       8,758     8,991     10,137       11,645     9,789     9,599       5,437     4,349     4,540       1,031     924     875       13,935     13,507     14,321       \$ 13,721     \$ 13,914	\$ 4,479       \$ 3,847       \$ 4,895         Act       819         277       305       467         27.9%       26.5%       25.8%         200       224       347         4,679       4,071       4,423         8,758       8,991       10,137       10,997         11,645       9,789       9,599       11,738         5,437       4,349       4,540       4,777         1,031       924       875       1,523         13,935       13,507       14,321       16,435         \$ 13,721       \$ 13,914       \$ 15,378



#### **Calculation of Capital Expenditures**

	December 31,								
In Millions of Dollars	2013	2014	2015	2016	2017	2018			
Sustaining CAPEX	\$ 825	\$ 706	\$ 815	\$ 1,109	\$ 1,019	\$ 1,052			
Growth CAPEX	736	793	625	1,134	528	1,053			
Expenditures for property, plant and equipment	\$ 1,561	\$ 1,499	\$ 1,440	\$ 2,243	\$ 1,547	\$ 2,105			
Average Sustaining CAPEX (2013-2017) Average Growth CAPEX (2013-2017)					\$ 895 \$ 763				
Growth CAPEX (2015-2018)						\$ 3,340			

