

## First Quarter 2019 Earnings Presentation

May 1, 2019



#### **Forward-Looking Statements**

This communication includes forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. These statements relate to analyses and other information that are based on management's beliefs, certain assumptions made by management, forecasts of future results, and current expectations, estimates and projections about the markets and economy in which we and our various segments operate. The statements contained in this presentation that are not statements of historical fact may include forward-looking statements that involve a number of risks and uncertainties.

We use the words "anticipate," "intend," "may," "expect," "believe," "should," "plan," "project," "estimate," "forecast," "optimistic," and variations of such words and similar expressions in this presentation to identify such forward-looking statements. These statements are not guarantees of future performance and involve certain risks, uncertainties and assumptions, which are difficult to predict and many of which are beyond our control. Therefore, actual outcomes and results may differ materially from those matters expressed or implied in such forward-looking statements. All references to expectations and other forward-looking statements are based on expectations at April 30, 2019. Olin undertakes no obligation to update publicly any forward-looking statements, whether as a result of future events, new information or otherwise.

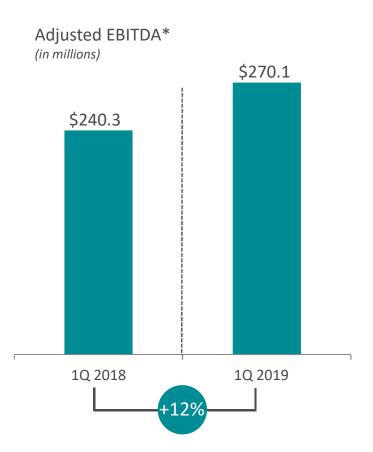
Factors that could cause or contribute to such differences include, but are not limited to: our sensitivity to economic, business and market conditions in the U.S. and overseas; the cyclical nature of our operating results and the supply/demand balance for our products; our reliance on a limited number of suppliers for specified feedstock and services, including third-party transportation services; higher-than-expected raw material, energy, transportation, and/or logistics costs; failure to control costs or to achieve targeted cost reductions; new regulations or public policy changes regarding the transportation of hazardous chemicals and the security of chemical manufacturing facilities; unexpected manufacturing interruptions and outages; complications resulting from our multiple enterprise resource planning systems and the conversion to a new system; changes in, or failure to comply with, legislation or government regulations or policies; the failure or an interruption of our information technology systems; economic and industry downturns; declines in global equity markets and interest rates impacting pension plan asset values and liabilities; unexpected litigation outcomes; adverse changes in international markets; weak industry conditions affecting our ability to comply with credit facility covenants; the failure to attract, retain and motivate key employees; our substantial amount of indebtedness and debt service obligations; environmental investigation, remediation and legal costs; asset impairment charges resulting from the failure to realize our long range plan assumptions; adverse conditions in the credit and capital markets; and the other risks detailed in Olin's Form 10-K for the fiscal year ended December 31, 2018. All of the forward-looking statements should be considered in light of these factors. In addition, other risks and uncertainties not presently known to Olin or that Olin considers immaterial could affect the accuracy of our forward-looking statements. The reader is cautioned not to rely u

#### **Non-GAAP Financial Measures**

In addition to U.S. GAAP financial measures, this presentation includes certain non-GAAP financial measures including EBITDA, and Adjusted EBITDA. These non-GAAP measures are in addition to, not a substitute for or superior to, measures for financial performance prepared in accordance with U.S. GAAP. Definitions of these measures and reconciliation of GAAP to non-GAAP measures are provided in the appendix to this presentation.



## First Quarter 2019 Highlights



- Highest first quarter level since Olin's transformative acquisition in 2015
  - First quarter 2019 adjusted EBITDA expanded more than 12% over 1Q18
- Reduced debt by \$50 million
  - Remain on track for target debt reduction of \$250 million to \$300 million in 2019
- Returned a total of \$46 million to shareholders
  - \$33 million in quarterly dividends
  - \$13 million of share repurchases
- Full year 2019 adjusted EBITDA guidance of \$1.265 billion, containing more risk than opportunity

<sup>\*</sup>First quarter net income is \$41.7 million. Olin's definition of "Adjusted EBITDA" (Earnings before interest, taxes, depreciation and amortization) is net income (loss) plus an add-back for depreciation and amortization, interest expense (income), income tax expense (benefit), other expense (income), restructuring charges, acquisition-related costs, and certain other non-recurring items.



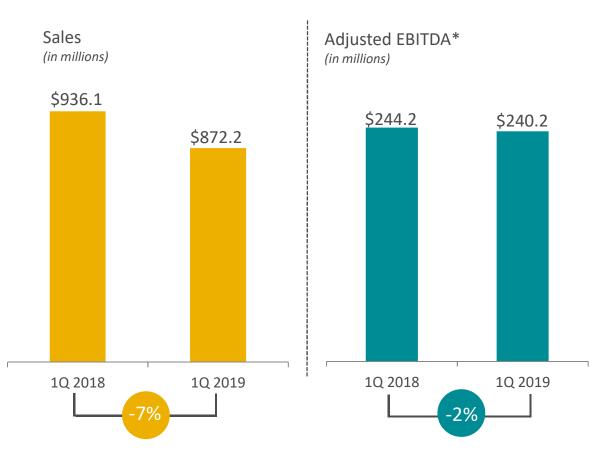
## Chlor Alkali Products and Vinyls Segment Performance

#### 1Q19 Performance vs. 1Q18

- Significantly lower caustic soda pricing
- Higher pricing for chlorine, EDC and other chlorine-derivatives
- Lower maintenance turnaround and electricity costs
- Higher ethylene costs due to increased ethane prices

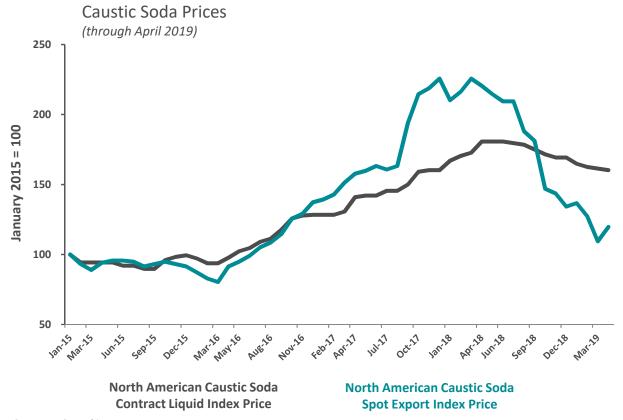
#### 2Q19 Outlook vs. 1Q19

- Expect lower average caustic soda pricing
- Ongoing price strength in chlorine, EDC and other chlorine-derivatives
- Higher planned maintenance turnaround costs





# Near-term supply/demand dynamics for the chlor alkali sector suggest an approaching inflection point for caustic soda



- Caustic soda export pricing declined further in the first quarter of 2019 but remain well above 2016 levels
- Anticipate lingering caustic soda demand dislocations to ease
- Reduced global supply from maintenance outages
- Price bottoming in the second quarter with price improvement during the second half of 2019
- Furthermore, Olin expects chlorine, EDC and other chlorinederivative pricing to remain solid

Source: IHS Markit

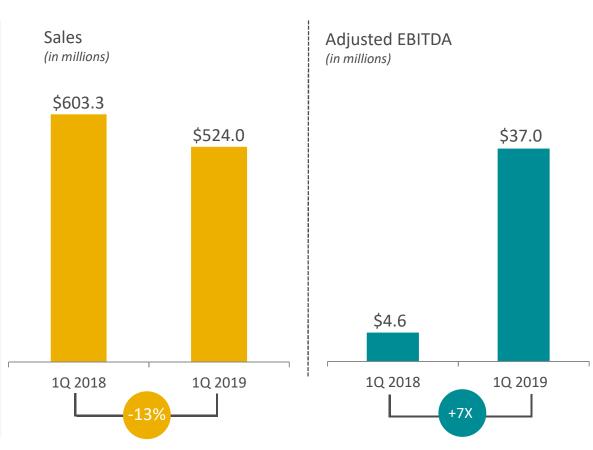


#### 1Q19 Performance vs. 1Q18

- Lower maintenance turnaround costs
- Lower sales volumes due to a slowerthan-anticipated return of customer demand
- Lower raw material costs
- Lower product pricing in-line with raw material cost decline

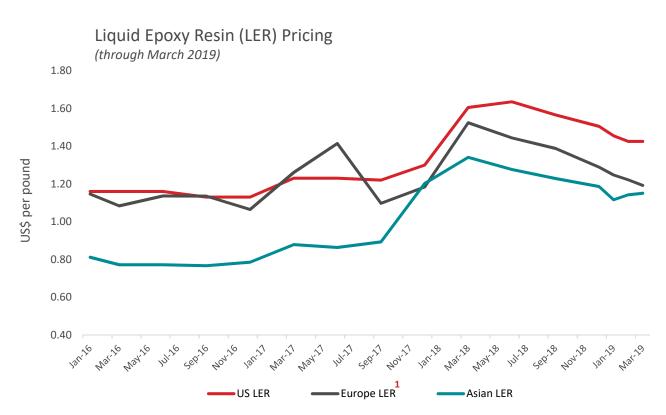
#### **2Q19 Outlook vs. 1Q19**

- Higher planned turnaround costs
- Expect improved product pricing and higher raw material costs
- Ongoing volume risk associated with the Houston-area storage terminal fire and subsequent terminal outage





## **Liquid Epoxy Resin Pricing**



- While average first quarter 2019 LER prices retraced modestly year-over-year, Asian and U.S. LER prices saw an uptick in March
- Expected global turnarounds and improved seasonal demand should tighten supply and demand fundamentals in epichlorohydrin starting in 2Q19, which should spur an increase in global LER pricing through the balance of 2019

Source: ICIS



## Positive, long-term market fundamentals for the chlor alkali and Positive, long-term market in epoxy sectors remain intact

### **Chlor Alkali Products and Vinyls**

- Structural changes in chlor alkali sector driving demand growth on both sides of ECU
- Minimal global capacity additions and announcements to meet growing demand
- Current industry economics do not support world-scale chlor alkali capital requirements

### **Epoxy**



- Expect global growth
- Tightening supply and demand fundamentals expected over the next several years
- Minimal announced capacity additions to date



## Winchester Segment Performance

#### 1Q19 Performance vs. 1Q18

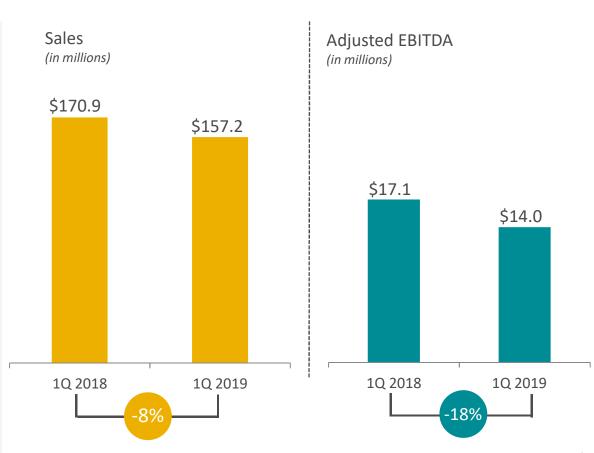
- Lower military volumes
- Lower pricing and a less favorable product mix
- Lower commodity, other material and operating costs

#### **2Q19 Outlook vs. 1Q19**

- Expect similar level of commercial sales
- Expect increased military sales

#### FY 2019 Outlook

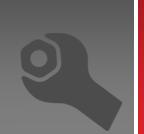
- Anticipate full year adjusted EBITDA to be comparable to full year 2018 levels
- While we believe individual consumer inventory levels remain elevated, consumer ammunition usage and participation fundamentals are solid





Expect second quarter 2019 adjusted EBITDA to be lower sequentially – followed by a strong rebound in the year's second half

Expect approximately \$40 million of higher turnaround costs in both the Chlor Alkali and Epoxy segments, with 2Q19 forecasted to have the heaviest turnaround schedule of year



Anticipate ongoing strength in pricing for chlorine, EDC and other chlorinederivatives

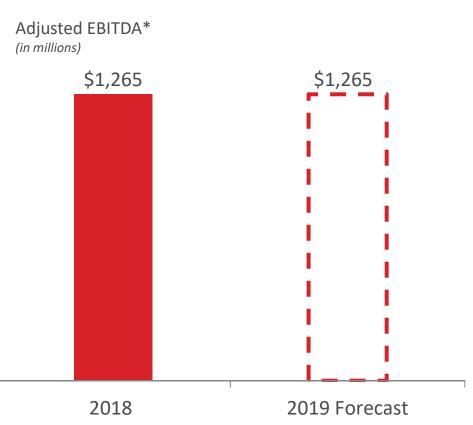
Impacts from first quarter 2019 caustic soda price indices decline will put ongoing downward pressure on pricing within Olin's system

Expect caustic soda pricing to begin to improve as the second quarter progresses

Lingering effects from the terminal storage fire and outage in Houston could limit Epoxy segment volumes



# Full year 2019 Adjusted EBITDA expected to be comparable to record full year 2018



#### **Key Factors:**

#### **Opportunities:**

- Higher chlorine, EDC and other chlorine-derivative pricing
- + Lower turnaround costs of ~ \$35 million
- + Higher Epoxy volumes and lower raw material costs

#### Risks:

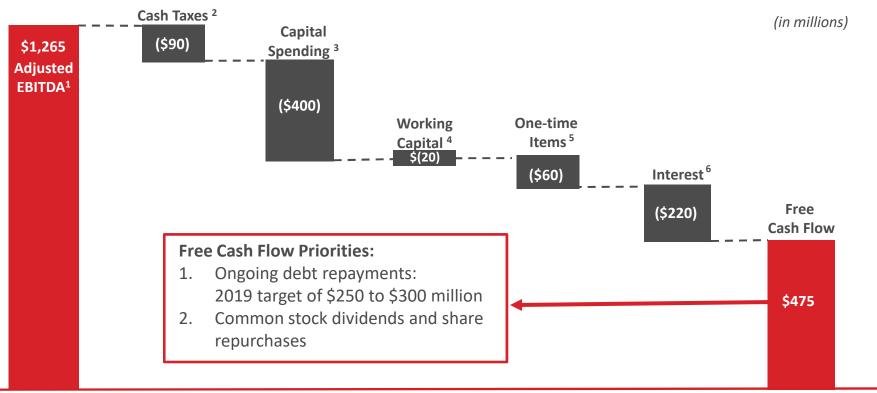
- Later than anticipated rebound in caustic soda pricing
- Lower average domestic and export caustic soda pricing
- Increased freight costs
- Lower Epoxy volumes and higher raw material costs

Full year 2019 adjusted EBITDA forecast assumes caustic soda pricing, in Olin's system, to improve by \$50 to \$70 per ton in 2H19 from 2Q19 levels



#### 2019 Cash flow forecast

## Debt reduction remains top priority for free cash flow



<sup>1:</sup> Olin's estimated 2019 Adjusted EBITDA forecast of \$1.265 billion

<sup>2:</sup> Estimated using the cash tax rate of 25%

<sup>3:</sup> Represents the mid-point of management's annual capital spending estimate range of \$375 million to \$425 million, which includes \$80 million associated with the information technology project

<sup>4:</sup> Estimated increase in working capital due to lower level of receivables sold under our factoring arrangement

<sup>5:</sup> One-time items include the information technology integration project costs, cash restructuring charges and proceeds from the sale of our equity interest in a non-consolidated affiliate



**Appendix** 



## Non-GAAP Financial Measures – Adjusted EBITDA (a)

Olin's definition of Adjusted EBITDA (Earnings before interest, taxes, depreciation, and amortization) is net income (loss) plus an add-back for depreciation and amortization, interest expense (income), income tax expense (benefit), other expense (income), restructuring charges, acquisition-related costs and certain other non-recurring items. Adjusted EBITDA is a non-GAAP financial measure. Management believes that this measure is meaningful to investors as a supplemental financial measure to assess the financial performance without regard to financing methods, capital structures, taxes or historical cost basis. The use of non-GAAP financial measures is not intended to replace any measures of performance determined in accordance with GAAP and Adjusted EBITDA presented may not be comparable to similarly titled measures of other companies. Reconciliation of forward-looking non-GAAP financial measures to the most directly comparable GAAP financial measures are omitted from this release because Olin is unable to provide such reconciliations without the use of unreasonable efforts. This inability results from the inherent difficulty in forecasting generally and quantifying certain projected amounts that are necessary for such reconciliations. In particular, sufficient information is not available to calculate certain adjustments required for such reconciliations, including interest expense (income), income tax expense (benefit), other expense (income), restructuring charges and acquisition-related costs. Because of our inability to calculate such adjustments, forward-looking net income guidance is also omitted from this release. We expect these adjustments to have a potentially significant impact on our future GAAP financial results.

Three Months	e IVION	tns
--------------	---------	-----

Ended	March	31
-------	-------	----

(in millions)	2019	2018	-
Reconciliation of NetIncome to Adjusted EBITDA:			
Net Income	\$ 41	.7 \$ 20.9	)
Add Back:			
Interest Expense	57	.4 63.7	(a) Unaud (b) Inform
Interest Income	(0.2	2) (0.4)	2018 v
Income Tax Provision	11	.4 6.6	and er (c) Certai
Depreciation and Amortization	152	.9 146.7	million for the
EBITDA	263	.2 237.5	
Add Back:			facility
Restructuring Charges	4.	.0 4.0	)
Acquisition-related Costs		- 0.3	3
Information Technology Integration Project (b)	14	.1 6.5	<b>i</b>
Certain Non-recurring Items (c)	(11.2	2) (8.0)	<u> </u>
Adjusted EBITDA	\$ 270	.1 \$ 240.3	3

#### lited.

- nation technology integration project charges for the three months ended March 31, 2019 and were associated with the implementation of new enterprise resource planning, manufacturing, ngineering systems, and related infrastructure costs.
- n non-recurring items for the three months ended March 31, 2019 included a gain of \$11.2 on the sale of our equity interest in a non-consolidated affiliate. Certain non-recurring items three months ended March 31, 2018 included an \$8.0 million insurance recovery associated second quarter 2017 business interruption at our Freeport, Texas vinyl chloride monomer



## Non-GAAP Financial Measures by Segment (a)

			Three Mon	iths Ended				Three Mor	iths Ended		
			March 3	1, 2019			March 31, 2018				
				Depreciation					Depreciation		
	Inco	me (loss)	Non-Recurring	and	Adjusted	Inc	ome (loss)	Non-Recurring	and	Adjusted	
(In millions)	befo	re Taxes	Items	Amortization	EBITDA	bef	ore Taxes	Items	Amortization	EBITDA	
Chlor Alkali Products and Vinyls	\$	120.4	\$ -	\$ 119.8	\$ 240.2	\$	130.5	\$ -	\$ 113.7 \$	244.2	
Ероху		10.5	-	26.5	37.0		(22.1)	-	26.7	4.6	
Winchester		9.1	-	4.9	14.0		12.0	-	5.1	17.1	
		140.0	-	151.2	291.2		120.4	-	145.5	265.9	
Environmental Expense		(1.8)	-	-	(1.8)		(2.3)	-	-	(2.3)	
Other Operating Income (b)		0.1	-	-	0.1		8.1	(8.0)	-	0.1	
Other Corporate and Unallocated Costs (c)		(39.1)	14.1	1.7	(23.3)		(36.5)	6.5	1.2	(28.8)	
Non-operating Pension Income		3.9	-	-	3.9		5.4	-	-	5.4	
Other Income (d)		11.2	(11.2)	-	<u>-</u>		-	-	-		
Adjusted EBITDA	\$	114.3	\$ 2.9	\$ 152.9	\$ 270.1	\$	95.1	\$ (1.5)	\$ 146.7 \$	240.3	

- (a) Unaudited.
- (b) Other operating income for the three months ended March 31, 2018 included an \$8.0 million insurance recovery associated with a second quarter 2017 business interruption at our Freeport, Texas vinyl chloride monomer facility.
- (c) Other corporate and unallocated costs for the three months ended March 31, 2019 and 2018 included information technology integration project charges of \$14.1 million and \$6.5 million, respectively, associated with the implementation of new enterprise resource planning, manufacturing, and engineering systems, and related infrastructure costs.
- (d) Other income for the three months ended March 31, 2019 included a gain of \$11.2 million on the sale of our equity interest in a non-consolidated affiliate.



# Chlor Alkali Products and Vinyls Pricing Comparison

	1Q19 vs.		
	1Q18	4Q18	
Chlorine			
Caustic Soda			
EDC		$\longleftrightarrow$	
Bleach			
HCI		$\longleftrightarrow$	
<b>Chlorinated Organics</b>	$\longleftrightarrow$	$\longleftrightarrow$	



(\$ in millions)

Line Item	Forecast	Key Elements
Capital Spending	375 to 425	Annual spending for maintenance capital of \$225 to \$275 and IT project spending of approximately \$80 million and other projects
Depreciation & Amortization	590 to 610	Forecast levels are comparable to 2018 expense
Non-operating Pension Income	15 to 20	Lower than 2018 income levels by approximately \$5 million
<b>Environmental Expense</b>	30 to 40	Higher than 2018 levels by approximately \$30 million; expect agency action
Other Corporate	100 to 110	Forecast is an increase from 2018 levels primarily reflecting higher stock-based compensation costs
Restructuring & IT Project Costs	80	Information technology integration project and restructuring costs
Book Effective Tax Rate	25%	Comparable with 2018 book effective tax rate
Cash Tax Rate	25%	Higher than 2018 as Olin exhausted the tax credit carryforwards that were created with the 2015 acquisition and began paying U.S. Federal taxes in late 2018



## Chlor Alkali Annual EBITDA Sensitivity

<b>.</b>		<b>.</b>	
Pri	ce	Dri	ver

Chlorine

Caustic

**EDC** 

**Price Change** 

\$10/ton

\$10/ton

\$.01/pound

Annual EBITDA Impact (in millions)

\$10

\$30

\$20

**Cost Driver** 

**Natural Gas** 

**Ethane** 

**Price Change** 

\$1/mmBtu

\$.01/gallon

Annual EBITDA Impact (in millions)

\$45 to \$55

\$3



## Olin Caustic Soda Price Realization

#### **Fundamental Principle**

• A \$10 per ton change in Olin's caustic soda selling price changes annual adjusted EBITDA by approximately \$30 million

#### **Export Sales**

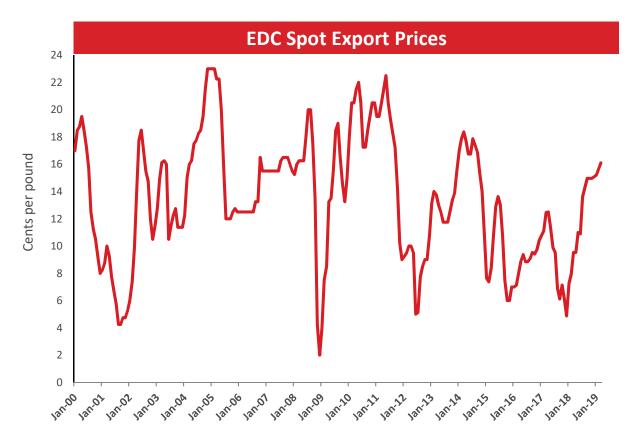
- Typically range between 20% and 25% of caustic sales
- Sold on a combination of negotiated sales and export index price
- Realization of index price changes are typically 90% to 100%
- Changes in export index prices are typically realized on a 30 to 60 day lag

#### **Domestic Sales**

- Contracts are made up of a combination of negotiated and index-based pricing terms
- Index price changes typically occur 30 to 60 days post our price nomination
- Realization of index price changes are typically 70% to 100%
- Overall price realization lags index price changes by 0 to 90 days



## EDC Pricing History 2000 – March 2019



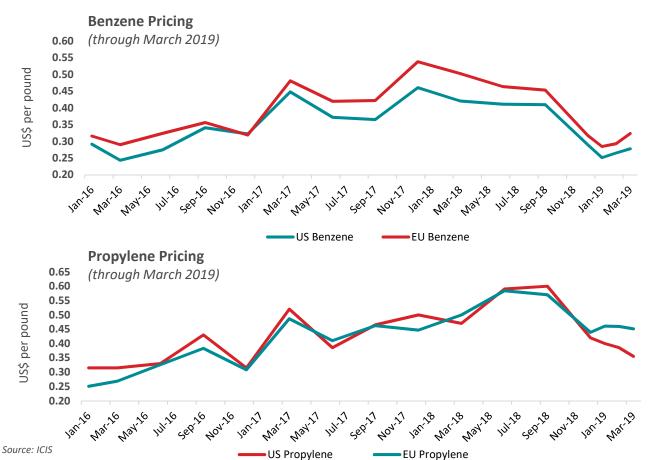
- Pricing has recovered from the 5 year lows experienced in December 2017
- Average 1Q19 USGC pricing improved modestly compared to 4Q18, while average pricing approximately doubled yearover year
- A one cent change in Olin's EDC price changes annual adjusted EBITDA by \$20 million

20

Source: IHS Markit



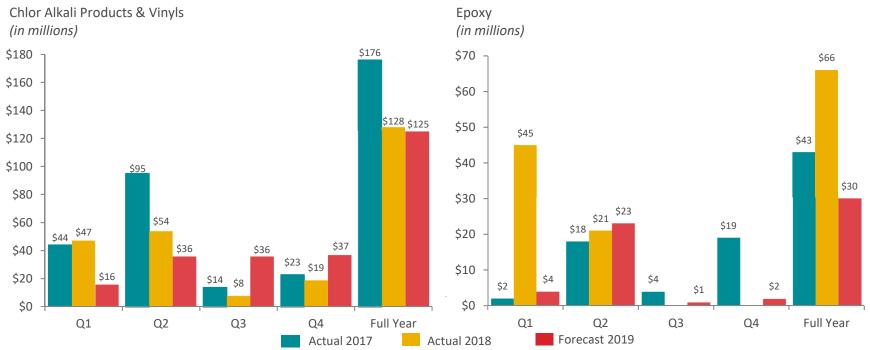
## Raw Material Costs - Benzene & Propylene Pricing



- Sequentially, U.S. and European benzene and propylene prices declined significantly
- 1Q19 U.S. and European benzene prices have also moved lower year-over-year, declining 38% and 32% respectively
- U.S and European propylene 1Q19 prices declined 28% and 7%, respectively, compared to 1Q18



### Maintenance Turnaround Costs<sup>1</sup>

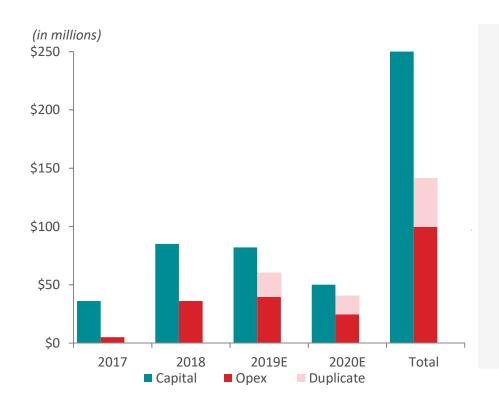


- Full year 2019 turnaround schedule will vary from the historic quarterly cadence to align with planned customer outages
- Expect heaviest turnaround schedule in 2Q19
- Full year 2019 turnaround costs expected to be approximately \$30 to \$40 million lower than 2018 primarily in the Epoxy segment

<sup>1:</sup> Maintenance turnaround costs include maintenance costs and lost volume penalties associated with unabsorbed fixed manufacturing costs from lost sales associated with the turnarounds and outages.



## Information Technology Integration Update



- During 2017, Olin began implementing new enterprise resource planning, manufacturing and engineering systems, and related IT infrastructure
- Objective is to standardize business processes, while maximizing costs effectiveness, efficiency and control across the global chemical operations
- Expected completion by end of 2020
- Project required due to expiration of IT transition service agreement with Dow
- Expect annual cost savings of ~\$50 million beginning in 2021
- Adjusted EBITDA excludes project-related operational charges and duplicative costs