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Olin Corp. (OLN)

Q2 2018 Earnings Call

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John E. Fischer

Chairman, President and Chief Executive Officer, Olin Corp.

MANAGEMENT DISCUSSION SECTION

Operator: Good morning and welcome to the Olin Corporation Second Quarter 2018 Earnings Conference Call. All participants will be in listen-only mode. [Operator Instruction] After today's presentation, there will be an opportunity to ask questions. [Operator Instructions] Please note that this event is being recorded.

I would now like to turn the conference over to Larry Kromidas, Olin's Director of Investor Relations. Please go ahead, sir.

Larry P. Kromidas

Director-Investor Relations & Assistant Treasurer, Olin Corp.

Thank you, Cole. Good morning, everyone, and thank you for joining us on our second quarter earnings call. Before we begin this morning, I want to remind everyone that this presentation along with the associated slides and the question-and-answer session following our prepared remarks will include statements regarding estimates of future performance. Please note that these are forward-looking statements and that actual results could differ materially from those projected. Some of the factors that could cause actual results to differ from our projections are described without limitations in the risk factors section of our most recent Form 10-K and in yesterday's earnings press release.

A copy of today's transcript and slides will be available on our website in the Investors section under Calendar of Events. The earnings press release and other financial data and information are available under Press Releases. With me this morning are John Fischer, Olin's Chairman, President and Chief Executive Officer; Pat Dawson, Executive Vice President and President, Epoxy and International; John McIntosh, Executive Vice President, Synergies and Systems; Jim Varilek, Executive Vice President and President, Chlor Alkali Products and Vinyls and Services; and Todd Slater, Vice President and Chief Financial Officer.

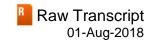
Now I'd like to turn the call over to John Fischer. John?

John E. Fischer

Chairman, President and Chief Executive Officer, Olin Corp.

Thank you, Larry. Good morning,

and thank you for joining us today. During this morning's call, I will begin by describing the four key highlights of Olin's second quarter performance, followed by a more detailed discussion of each of our business segments. So, let's turn to slide 3.



In the second quarter of 2018, Olin generated the highest level of quarterly adjusted EBITDA since the acquisition of the DowDuPont Chlorine Products assets. After the strong performance in the second quarter by our Chlor Alkali Products and Vinyls and Epoxy businesses, we are raising our adjusted EBITDA guidance for 2018 by \$50 million to \$1.3 billion with upside opportunities and downside risks of approximately 4%.

This year's major turnarounds in our Chlor Alkali Products and Vinyls and Epoxy businesses have been completed on schedule and on budget. Maintenance turnaround cost during the second half of this year will be approximately \$135 million lower than in the first half of the year. This is consistent with the normal seasonal pattern of our planned maintenance outages. The maintenance turnaround costs are expected to be approximately \$195 million in 2018, which would be approximately \$25 million lower than 2017 turnaround cost. We are forecasting 2019 planned maintenance turnaround cost to be approximately \$30 million to \$40 million lower than our expected 2018 levels.

The Epoxy business earned approximately \$50 million of adjusted EBITDA during the second quarter, a quarter which was impacted by \$21 million of planned maintenance turnaround cost. The overall supply and demand environment for epoxy resins has continued to be favorable. With the significant maintenance turnaround successfully completed, we expect improved volumes and improved results in the second half of 2018.

However,

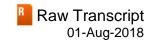
a word of caution, higher raw material costs, primarily benzene and propylene, are expected to dampen the second half improvement. Caustic soda prices in Olin system increased approximately 5% in the second quarter of 2018 compared to the first quarter, which follows a 10% sequential increase in the first quarter. We are expecting our domestic caustic soda prices to increase further in the third quarter.

Domestic contract caustic soda price indices have been essentially flat for the last three months, reflecting a more balanced supply and demand environment during the seasonally stronger period of chlorine demand. In second quarter, we saw some modest weakness in the export caustic soda market. The decrease in export spot caustic soda pricing has not impacted the domestic caustic soda contract prices with North America caustic soda demand remaining strong. We will discuss the caustic soda market in more detail in a couple of slides. But we are confident that a positive caustic soda cycle remains intact and expect continued long-term caustic soda pricing improvement.

Now turning to the business segments beginning with Chlor Alkali Products and Vinyls, which is summarized on slide 4. Second quarter 2018 Chlor Alkali Products and Vinyls adjusted EBITDA of \$290.3 million improved 82% compared to the second quarter of 2017. Increased earnings were primarily due to higher pricing for caustic soda, chlorine, and other chlorine derivatives.

We also experienced higher volumes in the second quarter compared to last year with Olin setting quarterly records for both bleach and chlorinated organic shipments. Ethylene dichloride prices in Olin system increased approximately 40% in the second quarter of 2018 compared to the first quarter, which fall to 25% sequential increase in the first quarter. We're expecting ethylene dichloride prices to increase further in the third quarter. We've experienced

increased demand from Europe and improved pricing in Asia throughout 2018. We believe the improved pricing in Asia reflects strong PVC demand, higher naphtha-based ethylene costs and lower caustic soda prices in China. We now expect full-year 2018 ethylene dichloride pricing to improve compared to 2017.



During the second quarter, we experienced sequential pricing improvement in chlorine, hydrochloric acid, bleach, and several chlorinated organic products. The Chlor Alkali Products and Vinyls' business is expected to improve in the second half of 2018 from the first half driven by higher pricing, increased volumes, and lower maintenance turnaround costs.

Olin continues to maintain its positive long-term view of caustic soda pricing. This is summarized on slide 5. In 2018, we expect caustic soda export volumes from North America to once again reach record levels. As I previously mentioned, we have seen some recent weakness in the export caustic soda market. The U.S. Gulf Coast export spot index decreased \$48 per metric ton in the second quarter of 2018, but was flat in July after increasing approximately \$260 per metric ton in 2017.

A key point of consideration for Olin, during the first half of 2018 approximately 1% of Olin's caustic soda sales were spot sales. Since the acquisition, we have moved to a caustic soda sales model that is virtually all contract based. We would also observe that the volumes associated with recently lower priced spot export trades have been very minimal. For the U.S. Gulf Coast export pricing has been under pressure in the last few months due to regional conditions in Asia, China, Brazil, and Europe, influencing global supply

and demand dynamics. We're convinced that these regional factors are short term.

The capacity additions that have been announced recently will not impact the market for approximately three years and are small in relation to the expected growth in caustic soda demand. Strong global and U.S. GDP growth continues to drive the caustic soda market growth in pulp and paper, water treatment, organic and inorganic chemicals, and aluminum. As a result, we believe the favorable long term global caustic soda market dynamics that have been experienced over the past two years remain in place.

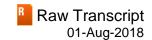
Let us now move onto the performance of our Epoxy segment, which is summarized on slide 6. Second quarter 2018 Epoxy adjusted EBITDA of \$49.9 million was approximately \$35 million higher than the second quarter 2017 results. The significant earnings improvement was driven by higher product pricing, partially offset by higher raw material costs and lower volumes.

The lower volumes were primarily due to a cooler-than-normal spring in North America which delayed industrial coding customers' demand. We are forecasting improved epoxy resin sales in the third quarter of 2018 compared to both the second quarter of 2018 and the third quarter of last year. During the first half of 2018, propylene cost increased approximately 23% compared to 2017 levels. And we expect third quarter raw material costs increased approximately \$20 million to \$25 million sequentially from second quarter levels.

This higher raw material costs represented potential offset to the sequential benefit from lower maintenance turnaround costs and improved volumes. We're encouraged by the second quarter results in the Epoxy business and the overall supply and demand and dynamics present in the market.

With the significant maintenance turnaround successfully completed, we expect improved volumes and improved results in the second half of 2018 and into 2019 with the risk of higher raw material costs primarily, benzene and propylene, a potential negative.

On slide 7, we show liquid epoxy resin pricing over the past two and one half years for the United States, Europe and Asia. Resin pricing has improved and each region since the beginning of 2016. A portion of these increases have been necessary to recover the higher raw material costs, principally benzene and propylene. Tighter market



conditions for liquid epoxy resin have added to the price momentum and these dynamics are expected to continue.

The current forecasted demand growth for our products over the next several years, depending on the geographic location and the application, is between 3% and 5% annually. Pricing dynamics have been different by region. In Asia, resin prices increased dramatically in the latter part of 2017 into 2018 and lately have moderated. In North America and Europe, prices increased late in the fourth quarter and through the beginning of the second quarter with less moderation. We have announced additional resin price increases in North America and Europe to be effective September 1.

Moving on to Winchester on slide 8. Second quarter 2018 Winchester adjusted EBITDA was \$16.7 million, a decrease of \$6.8 million from the second quarter of 2017. Decline in year-over-year adjusted EBITDA was mainly the result of higher commodity and other material costs, which increased \$6.5 million in the second quarter of 2018 compared to the same period in 2017. For the full year of 2018, we

expect commodity and other material costs to increase approximately \$20 million from 2017 levels. During the second quarter, lower commercial ammunition sales were partially offset by higher sales to the military and law enforcement agencies.

We've seen commercial ammunition demand declined by approximately 8% during the first half of 2018, which followed a 17% decline in commercial demand in 2017. However, we do expect commercial demand to improve sequentially in the third quarter of 2018 from the second quarter level due to normal seasonal demand.

As a result, we expect Winchester's results to improve in the third quarter compared to the second quarter due to higher commercial sales. Throughout the first half of 2018, our efforts to recover higher commodity metal prices through higher selling prices have met with limited success.

Before I conclude, I would like to emphasize that our outlook for the chemical businesses is positive. We remain confident that we are in a multiyear up-cycle in caustic soda. We are also experiencing favorable volume and price trends in chlorine, ethylene dichloride and other chlorine derivative products.

In the epoxy business, we have also experienced improved volume and increased pricing. Our expectations of seasonally stronger second half of 2018 will provide the basis for further improvement as we move into 2019.

Now, I would like to turn the call over to Todd Slater. Todd?

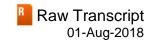
Todd A. Slater

Chief Financial Officer & Vice President, Olin Corp.

Thanks, John. Let's turn to our 2018 cash flow forecast, which is on slide 9. We expect to generate approximately \$500 million of free cash flow. Our top priority for free cash flow remains debt reduction and our expectation is that by the end of 2018, the combination of debt reduction and EBITDA growth will

reduce the net debt-to-EBITDA leverage ratio to the 2.5 times range.

During the first half of the year, we prepaid approximately \$80 million of debt. Starting with the midpoint of our full-year adjusted EBITDA forecast of \$1.3 billion on the far left of the waterfall chart, we deduct \$50 million in estimated tax payments, which primarily reflect income tax payments made to foreign jurisdictions in 2018. We're forecasting our cash tax rate will be in the 10% to 15% range for the year. Since 2015, Olin has not been the U.S.



federal tax payer because of the utilization of net operating loss carry forwards, primarily arising out of cost associated with the acquisition in 2015.

Because of this, we do not expect to be a U.S. federal tax payer in 2018. While we are continuing to analyze the full impact of the Tax Cuts and Jobs Act of 2017, the cash tax benefit to Olin of the changes in the tax law is minimal in 2018 due to the tax credit carry forward. We do expect the new law to provide cash tax benefits to Olin beginning in 2019. The new law is currently estimated to reduce our cash tax rate for 2019 and beyond to the 15% to 20% range. This translates into an estimated annual reduction in cash taxes of approximately \$75 million.

Column 3 reflects the midpoint of our current forecast for capital spending of \$400 million, which includes annual maintenance capital spending

of between \$225 and \$275 million and the investment associated with our multiyear information technology project of approximately \$100 million. As we have previously discussed in 2017, we began a multiyear project to implement new enterprise resource planning, manufacturing, and engineering systems across the heritage Olin and the acquired Dow Chlorine Products businesses. The project includes required information technology infrastructure.

Now, turning to the fourth column. We were expecting working capital to be a use of cash in 2018 of approximately \$50 million. The estimated increase in working capital is primarily due to higher selling prices and inventory costs associated with hydrocarbon in 2018. We currently expect revenue for 2018 to increase approximately 15% compared to 2017 levels.

In the next column, onetime items of approximately \$60 million include integration, cash restructuring cost, the first quarter's \$8 million business interruption, insurance recovery, and the approximately \$50 million for the expense portion of the multiyear IT project as I just spoke about.

The next column represents the estimate of interest expense. We have approximately 20% of our debt at variable interest rates. After the debt refinancing that we completed in January, we are forecasting 2018 interest rates to be higher than those we experienced in 2017. We are forecasting to generate \$500 million of free cash flow in 2018. We are targeting a minimum debt reduction of approximately \$300 million this year of

\$300 million this year are paying our normal quarterly dividend totaling approximately \$134 million. While debt reduction remains our top priority for free cash flow generation, we began to opportunistically repurchase shares in the second quarter with a goal of offsetting dilution and to-date we have repurchased approximately 300,000 shares.

Finally, on Thursday, July 26, Olin's Board of Directors declared a dividend of \$0.20 on each share of Olin common stock. The dividend is payable on September 10, 2018 to shareholders of record at the close of business on August 10, 2018. This is the 367th consecutive quarterly dividend to be paid by the company.

Operator, we are now ready to take questions.

QUESTION AND ANSWER SECTION

Operator : Thank you. We will now begin the question-and-answer session. [Operator Instructions] At this time we will pause momentarily to assemble our roster. And our first question comes from Don Carson from Susquehanna. Please go ahead.
Donald Carson
So, John, where do you think we are in the chlor alkali cycle? You've talked in the past about the mid-cycle earnings of EBITDA of a \$1.5 billion, do you – we can get there by next year? And as you look, you expressed confidence that caustic pricing will continue to increase what sort of the magnitude versus what you show on slide 5 in terms of what we've seen over the last year?
John E. Fischer Chairman, President and Chief Executive Officer, Olin Corp.
Your first question, I think, from the standpoint of achieving mid-cycle of \$1.5 billion, I think that is a 2019 or 2020 event for us. I think from a standpoint of where we are in the cycle, I would say we're at worst case halfway through the cycle. I think what we're going to see though is that the level or the degree of price increases are going to be slower as we go forward than we've seen in the past. We obviously saw a significant jump last year. But I think it will be more steady increases. And I think we'll see occasionally things some dislocations around events and production in certain areas that will cause slowing down of those increases, which is some of what we've seen right now, recently.
Don Carson Q
And then, a follow up on Epoxy. So, how would you characterize – what's your view on what's your average margins will be this year versus last year? And can you help us out at all with any sort of idea of operating leverage per – related to changes in say a \$0.01 margin per pound?
A
I'm not really sure from a competitive standpoint we want to answer either of those questions. I would tell you that if you look at the – if you go back to the investor presentation we made in February of 2016, we showed a chart that suggested that EBITDA could reach \$250 million to \$300 million. And I would say, based on where we are today, we're making very good progress towards achieving that.
Don Carson Q
Okay. Thank you.
Operator: And our next question comes from Neel Kumar from Morgan Stanley. Please go ahead.

Neel Kumar	Q
Hi. Good morning.	
	A
Good morning.	
Neel Kumar	Q
What is your – your \$1.3 billion EBITDA guidance, I assume, with regards to cost at EDC and epox as of July levels?	y prices, is it
Todd A. Slater Chief Financial Officer & Vice President, Olin Corp.	A
Neel, this is Todd. It assumes the pricing.	
for caustic that was in effect at the end of July. And for EDC, it assumes our outlook for the full year higher priced in 2018 than it was in 2017. That is an improvement over what we've talked about in tearnings calls.	_
And, on Epoxy, I think we haven't talked about pricing other than the improvement that you saw on then there's a September 1 price announcement out there. But don't – on Epoxy, as we were clear, million to \$25 million of higher hydrocarbons that are coming through in the third quarter compared quarter.	there is \$20
Neel Kumar	Q
Thanks. That's helpful. And then, you've also guided to maintenance costs declining additional \$30 million in 2019. Do you believe that it would be a good run rate level for maintenance going forward come down even further?	
	A
I think we guided today, it would be \$30 million to \$40 million lower in 2019 than they were in 2018.	
Neel Kumar	Q
Right. Yeah. Maybe you heard me wrong, but that's what I was saying. Is that basically a new run ralevels or do you think they can come down even more in 2020 going forward?	ate at 2019
	Λ



I think if you look at there are – we've talked about there are large turnarounds in three different assets, the Epoxy assets which are done every five to six years which have now been done, and the VCM asset which is done every three years. That was done in 2017. So, I would say if you looked at it on balance, 2019 is probably near the low end of what we would see.

Neel Kumar
I see. Okay. Great. And then, last question, in the Epoxy, where are you in your
longer-term initiatives to drive cost out of that business? Then upgrade your portfolio and product mix.
Pat Dawson
Yeah. Neel, this is Pat Dawson. We have announced that we have been – we're going to drive about \$100 million of cost over the next five years. I would say we have made good progress on that here in the last two years. So, that remains productivity and driving productivity improvements is a critical part of the Epoxy strategy going forward.
Neel Kumar
Great. Thanks.
Operator : And our next question comes from Kevin McCarthy from Vertical Research Partners. Please go ahead.
Kevin McCarthy
Yes. Good morning. Couple of questions on Epoxy. How would you describe operating rate in North America and Europe? And likewise, how would you describe your level of confidence that prices can increase enough through the course of time to offset the \$20 million to \$25 million of cost inflation that you referenced. What is the outlook there?
A

Yeah. The outlook, if you start back just a few years ago, the outlook has been improving over the past two years, in terms of supply/demand fundamentals. So, supply/demand we think continues to improve. We have not announced any operating rates. It's not public information, but it's definitely improving.

We also see the crackdowns on the enforcement in China around the environmental regulations. As each month goes by, that seems to have more teeth in it and that has helped the improvement as well. But also, you don't see any new additional capacity being added in the industry right now. And as long as we continue to grow in that 3% to 5% range

that we've talked about before, we think conditions will continue to improve.

Kevin McCarthy

And as a follow-up, propylene prices have been relatively high and volatile lately in both the U.S. and Europe. Obviously, Olin is short of the molecule. Have you considered or would you consider vertical integration in propylene either on your own or synthetically through base-loading someone else's asset?

A

Yeah. I think that's something that we would continue to evaluate. Propylene obviously follows what oil has been doing, and oil has been hitting highs here in the last couple of months. So, that definitely is a headwind and we definitely are always looking at options to improve our propylene position.

Kevin McCarthy

Thank you.

Operator: And our next question comes from Jeff Zekauskas from JPMorgan. Please go ahead.

Jeff Zekauskas

Thanks very much. On your slide 7, you show trends in liquid epoxy resin pricing and all of the three regions are decreasing as raw materials are going up. Can you describe what the market dynamic is and do you have an idea of where you think things will stabilize?

A

Yeah. I think, first of all, I mean, if you look at where this started back probably the middle of last year, third quarter of last year you've seen a pretty good run up. And as I just mentioned earlier, I think that our supply-demand fundamentals has been getting better across the whole Epoxy chain. I think this little cool down that you've seen here I think prices had gotten pretty frothy towards the end of last year and the beginning of the year. So, I think that things are stable and

we've seen things that are very stable here the last three or four months. So, overall with this improving supply demand fundamentals, I think you're going to see better stability going forward than what you've seen in the past. And by the way, as John mentioned in his remarks, we do have a September first price increase out there in North America and Europe.

Jeff Zekauskas

Okay. And a question of caustic soda, I imagine that you have different caustic contracts that were signed at different points in time. If all of your contract caustic was now priced at the market price, would that make a difference to your earnings or how much might that change your average caustic realizations?



James Varilek

Yeah. This is this is Jim. Yeah, we've got momentum in the contracts and the contracts do renew over a period of time, two to three years oftentimes, sometimes extending beyond that. So, we constantly have contracts that are renewed and so we do have momentum going into the third quarter out of the second quarter. The prices that we attained there, index changes, and so forth that will continue to provide momentum into the third quarter, which is why we're saying that we will have higher domestic prices in Olin in the third quarter.

	A
I would just add to that. Typically, contract renewal season is in the fourth quarter. And we have contracts the anywhere from three to five years, so we still have a group of contracts that were negotiated in the 2015 timeframe, which you would say was not a seller's market at that point in time. And it's our expectation that is they roll over, you will see a meaningful improvement in our netback when we get to Q1 of 2019 versus Q4.	
	Q
Okay. Great. Thank you so much.	
Operator: And the next question comes from John Roberts from UBS. Please go ahead.	
John Roberts	Q
Thank you. Was the improvement in Epoxy is concentrated at all in LER, EPI, or aromatics?	
	А
Yeah. I would say that that really was across the Epoxy – our whole Epoxy value chain from the upst midstream to the downstream.	stream to the
John Roberts	Q
Okay. So, it's a very broad-based, you're seeing. And net LER, price chart would be reflective of kir of gravity of your mix?	d of the center
	А
I think it's a fair statement.	
John Roberts	Ω



Okay. And then, you gave your 2019 maintenance expense outlook. Do you have the capital budget yet for 2019 as well or anything else that you can share for us on a forward outlook? Not at this time, John. John Roberts Okay. Thank you. Operator: And our next question comes from Jim Sheehan from SunTrust. Please go ahead. Jim Sheehan You talked about the new capacity addition in Chlor Alkali as taking three years and not having a dramatic impact on long-term supply demand. Can you talk about why - the basis for your confidence in saying that? If you look at the capacity announcement and the size of it and you believe that caustic demand is growing at 2% annually, the new capacity represents two months' worth of global growth and maybe 10 months of domestic growth. So, that's really not a lot of capacity. Jim Sheehan Great. And on your outlook for 2018 EBITDA, you've got the range of plus or minus 4%. Obviously, raw materials are a factor there. What would happen – have to happen for you to get to the high end of that range? I think the biggest factor for us would be if we have a stronger-than-expected volume. We've got some opportunities around pricing of caustic soda and EDC. And I would say those are the two biggest. Jim Sheehan Thank you. Operator: And the next question comes from Matthew Blair from Tudor, Pickering, Holt. Please go ahead.

Matthew Blair

Q

Hey. Good morning. John, you mentioned you're expecting higher cost to contract pricing in Q3 despite some of the spot weakness. Could you explain what gives you confidence here? Is that just a function of what you're seeing on supply and demand? And, also, could you talk about what kind of demand trends are you seeing in the U.S., Europe, and Asia? Thanks.

James Varilek

А

Matthew, this is Jim. We do have confidence in what we're seeing. The demand picture actually for caustic is quite good. North America, the GDPs that you've seen, industrial production and so forth is very solid, very strong. We are confident in our third quarter numbers because of the fact that we have had success in the first and second quarter. Demand is strong in those carry-through with our contract situations that we have. And we'd expect that to continue on. There is nothing that takes us off of that.

From a global standpoint, we have seen some things in Latin America, in Asia that have impacted the export pricing. We believe those to be temporary. As capacity comes back on stream in Latin

America, we return to the trade flows that we had about a year ago and those were tight. And, in Asia, we also expect – even though we have seen some things in China in terms of the demand, we do expect capacity – some capacity to come offline. But we also expect the demand side to return to the norm there. So, there's nothing that takes us off of the long-term trends that we've been saying all along.

Continued global GDP, very strong, there's no capacity coming on stream anytime soon. And, actually, there's been capacity taken out and good GDPs around the world that drive the caustic growth. So, we expect a continued good environment as we go forward.

Matthew Blair



Okay. Thanks. And then, I guess based on current pricing, what do you think greenfield and brownfield economics are for new Chlor Alkali capacity in the U.S., whether in terms of like an IRR or maybe a multiple?

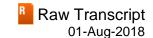
A

I wouldn't necessarily want to comment on an IRR because, remember, you're building an ECU and where the user puts his chlorine has a lot to do with that. I would say that we think, today, greenfield is probably north of \$1,500 a ton. I think brownfield all depends on who it is and what they're doing. There's probably some debottlenecking that can be done for \$750 to \$1,000 ton, I would imagine. But those kind of debottlenecks don't create world scale plans. They create 100,000 tons here and there.

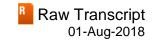
Matthew Blair



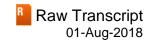
Got it. Thank you.



Operator: And the next question comes from Arun Viswanathan from RBC Capital Markets. Please go ahead. Arun Viswanathan Great. Thanks. Good morning, guys. Congrats on a good quarter. Thank you. Arun Viswanathan Just a question on the operating rates. We're seeing I guess relatively high operating rates in the mid-1990s now. And just wanted to get your thoughts on how we project for the rest of the year. I mean, should we expect operating rates to remain high in Q3, and that would result in your kind of stable pricing environment for caustic? And then, maybe operating rates tick down in Q4, and then allows for some pricing on typical maintenance, or is that seasonality kind of change now? Arun, I think you've outlined it actually quite well. We do expect operating rates to stay strong during the summer months. You've got a strong chlorine demand both from water treatment from a vinyl standpoint that will drive operating rates. There is some seasonality to those operating rates into the fourth quarter. And we would expect to see some modest decline. But overall the picture is still very snug from an operating capacity standpoint. Arun Viswanathan But is that the mechanism that you do expect prices to reaccelerate in Q4? The reason I ask is because there has been an increase for Q3, and now we've seen a decrease of \$5 in July. So, I guess should we assume that the price momentum picks back up in Q4 on the maintenance? And another reason I ask is because it seems like the maintenance has now been shifted a lot of it within the industry to the first two quarters of the year. But that might be wrong. So, maybe you could just elaborate on that. Yeah. The operating rates definitely have an impact on the pricing and that's what you've seen in caustic. And then any specific event-driven things that under a high operating rate environment causes some spikes, and we've seen that over the last couple of years. I think it's also important to note the chlorine side of the equation as well. And a lot of the chlorine derivatives, the tightness in the marketplace is driving the [ph] working 00:37:25 side and the pricing on the chlorine side as well.



Arun Viswanathan
Okay. That's helpful. And then maybe you can just give us your thoughts on input costs as well on – through the chain in vinyls. We've seen some increase in ethane. Is that an impact for you guys or is that [indiscernible] 00:37:45? Thanks.
A
We have a cost base ethylene and so now ethane being an input into that, yes, it does have an impact on our cost structure.
Arun Viswanathan
All right. Thanks.
Operator: And our next question comes from Eric Petrie from Citi. Please go ahead.
Eric Petrie
Hi. Good morning.
A
Good morning.
Eric Petrie Q
A question on the caustic soda prices, you noted going forward you expect smaller initiatives. And what price point do we get into a dynamic potential substitution in some end markets for either soda ash or alumina customers produce or purchasing more pure bauxite grades?
A
I think that customers are always going to want to try to optimize their usage and so forth and so that's something that can be done whether – in the alumina markets and so forth. They're doing that all the time.So, I don't see any specific change on the pricing. Alumina prices are moving, the affordability is there in terms of caustic soda production so – and pricing. So we're not – I'm not that concerned about that. Soda ash, quite honestly there's a – that market and those demands are running – they're running high capacities, there's a large switching cost and so forth. So, we don't see any impact from soda ash.
Eric Petrie



Helpful. Thank you. And then secondly, on your slide 7 with the liquid epoxy resin pricing dynamic and the gap between regions, are you seeing any competitive pressures from Asia producers and either Europe or U.S. markets? No, not really. It's been this way for many years. So, we don't see anything really changing dramatically. Actually, we see much better fundamentals as the market tightens we see better fundamentals in each of the regions. And I think that's been one of the main – a good data point for the fact that things are tighter. Thank you. **Operator:** And our next question comes from Stephen Byrne from Bank of America Merrill Lynch. Please go ahead. Stephen Byrne Hi. I was wondering if you had a roster of Chlor Alkali plants in China that you've drilled into and whether you have a view on the fraction that's not operating at historical levels, whether it's more a function of a permanent shutdown or a temporary idling or whether it's just a matter of implementing some updated pollution controls? I think the answer to that, in general, is we have some view and it's – some effect of all the three things that you mentioned.

Stephen Byrne

And similarly on Epoxy, are those Asian producers just a matter of improvement in emission controls that's driving that because you're not really dealing with a coal-derived unit operation?

Pat Dawson

No, no, but you are dealing with – sorry, this is Pat Dawson – you are dealing though with high-energy intensiveness. I mean that's where – it starts with chlorine to get to epichlorohydrin, which is key

raw materials. So, you are dealing with high energy, high resource, and a very environmentally challenging product from a water and a water treatment standpoint. So, we do see this new round of China regulations and enforcement continuing to have an impact on capacity in China.



Very good. Thank you.

Operator: And our next question comes from Dmitry Silversteyn from Longbow Research. Please go ahead.

Dmitry Silversteyn

Thanks for taking my question. A couple of them. One, on the Chlor Alkali segment. Can you talk a little bit about the domestic volume growth that you're seeing versus export growth in terms of if there's big differences in the

the domestic volume growth that you're seeing versus export growth in terms of if there's big differences in the pace of growth you mentioned in the overall market growing at about 2% globally but in terms of your volumes and where they're going? And in the export growth, can you talk a little bit about what kind of the main destinations are, is it still sort of Asia Pacific and Latin America or you're getting more and more into to Europe there?

Jim Varilek

This is Jim. The second part of the question in terms of destinations and so forth. The destinations out of the Gulf Coast are similar to what they have been, not a significant amount of trade differential. But Latin America has significant movement, and also into Asia Pacific, a lot into Australia into aluminum. There have been – there were earlier this year some movements to Europe in the second quarter. That's pretty much slowed down. So, not a dramatic shift in any of the trade flows out of the Gulf Coast.

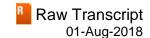
As far as demand, I think the best way to look at it is in terms of the GDPs because we have a tendency to track GDP quite well. And as you know, in the U.S., GDP has been relatively strong. So, we do have strong demand growth here in

the U.S. and we expect it to have that continue with the strong markets, pulp and paper market, in processed chemicals. Quite honestly, everything is relatively strong. So, we see good domestic demand.

That's not to say that they export around the world that demand is dropping off by any means. You get some dislocations here or there, but I would say again China is what it is, and the aluminum markets in Australia are [indiscernible] 00:43:51. So, the demand is there globally. And again, GDP is probably the best driver to use for our demand.

Dmitry Silversteyn

All right. Thank you. And on the second question on Winchester. How should we think about the profitability of this business in an environment of persistently high raw material costs that you don't seemed to be able to pass through? We've kind of talked about \$120 million, \$130 million in the annual EBITDA back in the day when you were relocating to – from Illinois to Mississippi. How should we think about sort of structural EBITDA of this business assuming the pricing stays where it is in terms of raw material and metal costs and your ability or lack thereof to recapture some of that margin?

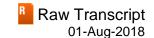


A

Dmitry, last quarter, when we talked about Winchester, we said we did not believe that 2018 results would be better than 2017. I mean, all the factors that you just described we have lower commercial volumes. However, we do think – if you look back historically, commercial volumes tend to decline somewhere around six consecutive quarters off of peak. The second quarter of this year would have been the sixth quarter. So, we have expectations that commercial volumes will

stabilize here the higher commodity cost. We've been able to offset some of that with better military volumes which, for us, should continue for several years and we've got to improve our operating costs. I would say, right now as we look at the world, I think the \$125 million was probably too high. But I definitely think that once we get to a more stable market environment, we will do better than what we did in 2017.

	Q
All right. That's helpful. Thank you.	
Operator: And our next question comes from Aleksey Yefremov from Nomura Instinet. Please	go ahead.
Aleksey Yefremov	Q
Good morning, everyone. Thank you. In Epoxy segment, your outage cost will decline approxim sequentially, and raw material costs are going up \$20 million to \$25 million. Should we think about as a sort of a neutral factor here and so your EBITDA could be about flat sequentially? Is it a go about the segment?	out Epoxy pricing
	A
Well, the one thing we did say was we expected improved volumes in the second half of Epoxy half. So, I think other than what you just said, if you don't add in improved volumes, it would be f	
Aleksey Yefremov	Q
So, John, just to clarify this \$20 million improvement in outage cost, it does not account for that right?	improved volume,
Todd A. Slater Chief Financial Officer & Vice President, Olin Corp.	A
Aleksey, this is Todd. There are additional volumes beyond the factor, that's just \$20 million of the outage costs as well as absorbed fixed cost.	he outage and
Aleksey Yefremov	Q



Understood. Okay. Thank you very much. And then, another question on Epoxy. If we look at slide 7, Asia

resin prices went up. They're approximately \$0.40 a pound. Is there any way to say how much costs went up and what's the current cost floor for these prices globally?

A

No, I don't think we have given any information on the cost floor other than saying that if you look at the published indexes on epichlorohydrin and BPA that those costs have been going up and that has a real impact on nonintegrated producers.

Aleksey Yefremov

Maybe one follow-up for Pat in epoxies as well. Do you think sort of the next move in August for these prices in U.S. and Europe is flat up or down? And, also, what gives you confidence in the September price increase?

Pat Dawson

А

I think what gives us confidence in the September increase is just the tightness of the market, so there's been some turnarounds. We obviously just came off of a big turnaround ourselves. So, we just don't see a lot of available product out there anywhere in the globe, and that gives us the most confidence.

Aleksey Yefremov

Great. Thank you.

Roger Spitz

Thanks very much. Good morning. I just want to help square the higher caustic soda pricing outlook and the higher EDC price outlook in the second half. I mean, usually, as you said before, EDC exports is where one pushes chlorine to make more caustic so they can't move in opposite directions frequently. I wonder if you might address that.

Operator: And our next question comes from Roger Spitz from Bank of America. Please go ahead.

Д

Yeah. Roger, remember, EDC for us is entirely an export product that with the short-term improvement in caustic soda prices is in the domestic market. Those two markets do not react to each other. It's caustic soda in the export market, which we've talked about was being lower and a factor for the higher EDC prices.

Roger Spitz



Got it. And on – a small product, but I guess you sell U.S. acetone [indiscernible] 00:49:29 Freeport facility, is that all under fixed spread contracts or acetone has been weak here in demand and pricing? Has that impacted you or it's all on cost plus fixed spread contracts for you?

Roger, it primarily moves around the indexes that you see published out there.

Roger Spitz

Got it. Thank you very much.

Operator: And our next question comes from Karl Blunden from Goldman Sachs. Please go ahead.

Karl Blunden

Hi. Good morning, guys. Thanks for the time. I just focused on slide 14, your 2018 bridge to the near-term \$1.5 billion potential. On the Epoxy piece, when you described Epoxy improvement in earnings, could you go into a bit more detail about what drives that? Is that a continuation of existing margins and simply run rating at a higher rate perhaps in the in the first half of 2019/2020 relative to where we were in 2018 or is there something else, maybe its operating rates? I'm interested in your view on what drives it and how big that driver could be.

A

The biggest driver as we move forward here is the absence of large outages that occurred both in 2017 and 2018 that will drive lower maintenance costs and improved volumes. Pat talked a little bit about productivity. That's a piece of it. And obviously, we've been in – we have the opportunity to be in a better long-term pricing

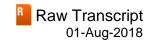
environment as we move through 2019 and 2020 than we've been in historically.

Karl Blunden

Got you. That's helpful. So, part of it is you and then part of it is an expectation on market pricing holding up. Just on the capital structure here, you've announced a \$300 million debt reduction target. What's the rationale for that? Is that tied in some way to the cash flow expectations you have for the business? Is it maybe more precision on where you want that to be through the cycle? Any thoughts around that, from Todd, perhaps? It'd be very helpful.

John E. Fischer
Chairman, President and Chief Executive Officer, Olin Corp.

This is John. We have a debt target that is based on what do we think the trough EBITDA in this business will be. Because as you know, it's a highly cyclical business, when the cycle turns, it turns and I'm not forecasting a turn to the negative cycle here. But that's what we are targeting, a specific debt level based upon what we think we can earn in a trough. And that's – that would be our objective.



A

And, Karl, what we've said is that by the time you get to the \$1.5 billion range of EBITDA, we'll have net debt to EBITDA under 2 times. And doing that math, you need to repay approximately \$700 million of debt from where we ended 2017. So, \$300 million – approximately \$300 million at a minimum is coming out this year.

ended 2017. So, \$300 million – approximately \$300 million at a minimum is coming out this year. Karl Blunden Got you. Okay. So, it's simply kind of allocating a timeframe to actions that you had in mind already. That's helpful. Thanks, guys. Appreciate it. Operator: And our next question comes from Owen Douglas from Baird. Please go ahead. Trelford Douglas Hi. Good morning, guys. Thanks for taking the question. Just a quick one, in terms of the outlook for the higher costs or the higher chlorine prices, while also being constructive on caustic soda. How much of that is a reflection on the market supply/demand balance for chlorine versus perhaps a little bit of sort of I guess cost push. I think it's more reflective of the supply-demand environment quite honestly. We talked about high operating rates earlier and we're seeing demand on both sides of the ECU, and that's what's driving pricing. Trelford Douglas Got it. I see. So, as things move forward in this cycle here, do you think that there's a real risk to softening on the caustic soda economics? Jim Varilek This is Jim. I guess the short answer would be no. We see a positive outlook with several years of runway left. And we would expect the economics to continue to improve. Trelford Douglas

Okay. That's very helpful. And final one for me. The outlook for Epoxy kind of sound a little bit more cautious than I was expecting with some of the commentary around the earnings potential for that business, appearing that you guys were not too far off of it. Can you sort of help me understand what do you think are some of the factors



holding back the enthusiasm?

Pat Dawson

A

Yeah. This is Pat. I think, first of all, you've seen on our graph 7 the run up that we've experienced here primarily in the last six to nine months. And I'd say we're cautiously optimistic about that run up and the sustainability of the supply demand fundamentals continuing to improve.

I think the other issue is around growth. And we talked about 3% to 5% market growth depending on geography and applications. And there's no question that we're probably seeing a little bit on the lower end of that growth curve than what we had expected at this point in time. And I would say, those factors are we think about going forward.

And, of course,

as we've mentioned and we'll mention again you've got the hydrocarbon volatility or you know the oil volatility that impacts our hydrocarbon costs that continue to be a concern looking forward.

Trelford Douglas

Okay. That is helpful. And final one from me, I know that you guys obviously have performed well, but still have these legacy 9.75% and 10% notes which take a little bite out of the EPF, if you will. So, just to help me understand a little bit, what are your priorities as far as some of this debt repayment? How much of it is around the absolute balance of debt versus also thinking about your sort of funding cost and what that does for your earnings?

A

I think the debt reduction targets are based on the long-term capital structure. The debt that's being repaid is designed to put us in a position, where we can refinance those 2020 bonds on the date with first day we can call them.

Trelford Douglas

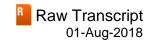
2020 bonds? I see. Sorry. The 2025 bonds and 2023 bonds, you mean?

A

Those – the debt that was issued in conjunction with the Dow transaction is first callable in October of 2020. And because of the Reverse Morris Trust can't really be called before October of 2020. And in today's economics on interest, you're looking at potentially saving between \$50 million and \$70 million once those bonds are called. But that can't happen until late 2020.

Trelford Douglas

Got it. I understand. Great. Thank you very much, guys.



Operator: There are no further questions. This concludes our question-and-answer session. I would now like to turn the conference back over to John Fischer for closing remarks.

John E. Fischer

Chairman, President and Chief Executive Officer, Olin Corp.

So, I'd like to thank everyone for joining us today and we look forward to speaking to you again about our third quarter results.

Operator: The conference is now concluded. Thank you for attending today's presentation. You may now disconnect.

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