KOPPERS

Unified Focus.
Diversified Portfolio.

***Wells Fargo Industrials Conference***
***May 7, 2019***

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and Treasurer

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# Strategic Overview

# Why Invest in KOP?

- ✓ Attractive **valuation**
- ✓ **Unified focus on wood protection technologies**; global leader; strong market position; **generally #1 or #2**
  - Railroad sector: treatment of wood crossties
  - Utility pole market: treatment of utility poles and piling
  - Pressure treated lumber: residential decking, fencing, outdoor structures, interior fire protection
  - Carbon pitch: serving aluminum industry
  - Refined chemicals: for production of concrete, rubber, plasticizers
- ✓ **Serving diversified geographies & end markets**; GDP-like growth with potential to outperform in select areas
- ✓ Consistently generate **strong cash flows**
- ✓ Demonstrated track record on **re-allocation of capital structure**
  - **Debt paydown priority use of cash**

**Global Leader in High Value, Vertically Integrated, Wood-Based Solutions Market**

# Investment Thesis

**Global leader in oil and water-borne preservatives** serving many market applications for **treated wood**

Successfully transitioned from a business built on producing carbon pitch to serve global aluminum industry into **an enterprise centered on the preservation and enhancement of wood**

**Knowledge of wood preservation is a core competency**

- Largest integrated producer of wood treatment preservatives for railroad crosstie industry in North America
- Performance Chemicals wood treatment preservatives serve various residential, industrial and agricultural markets

**Strategic plan to deliver significant profitability improvements**; continue to enhance product portfolio and capital structure

- Focusing on network optimization, commercial development and cost savings
- Improved CMC profitability by streamlining footprint/cost structure
- Reduced dependence on highly cyclical industries tied to oil and aluminum

**Wood Treatment Technologies Are At The Heart Of Our Value Creation Model**

# Business Strategy

## Repositioned As Leader In Wood Treatment Technologies

- Focusing on wood treatment and protection technology; niche markets with small number of sizable competitors
- Tighter focus around core competency of wood allows for better stability and visibility of earnings stream
- Investing in capacity to serve increased demand of copper-based wood preservative products; improve distribution of oil-borne wood preservative products
- Pursue growth opportunities through selective tuck-in acquisitions primarily in wood related markets

## Improve Profitability; Expand Margin

- Drivers to further profitability improvements
  - ✓ Savings from strategic initiatives
  - ✓ Full year of contribution from acquisitions
  - ✓ PC: new commercial opportunities
  - ✓ RUPS: cyclical recovery
  - ✓ CMC: $10M savings related to new naphthalene unit at facility in Stickney, IL
- $10M in benefits expected in 2019; part of $25M-$40M over 5 years
  - ✓ Network optimization
  - ✓ Commercial development opportunities
  - ✓ Raw materials and other cost savings

## Strengthen Balance Sheet; Improve Financial Flexibility

- Strong cash flow generation
- Divested non-core businesses
  - ✓ CMC – U.K. Specialty Chemicals; Clairton, Port Clarence & Scunthorpe distillation facilities; TKK minority-held JV
  - ✓ RUPS – KSA concrete tie joint venture; Wood Protection lumber-treating business
- Highly focused on debt reduction; increased leverage due to acquisitions in 2018
  - ✓ M.A. Energy Resources (February 2018)
  - ✓ Cox Industries (April 2018)
- Long-term goal of 2-3X net leverage ratio

# At-A-Glance

- Leading integrated global provider of oil and water-borne preservatives serving various market applications of treated wood
- Right-sized CMC business
- Global geographic footprint: 46 locations across North America, South America, Asia, Europe and Australia

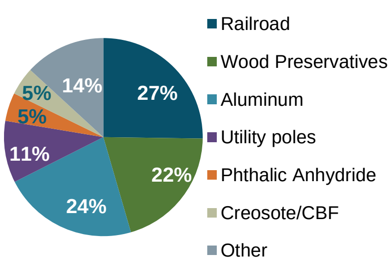
## Selected Product & Brand Overview


Pre-Treated Crossties

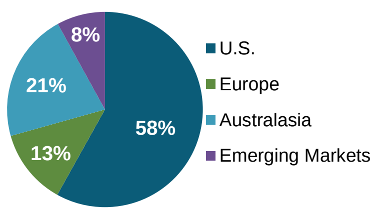

ADVANCE GUARD
Borate Pressure Treated Wood

Treated Crossties with End Plates

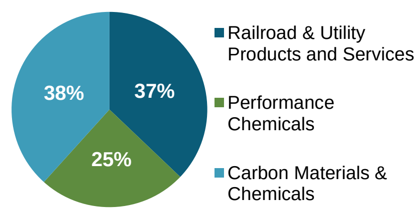
### Sales by End Market



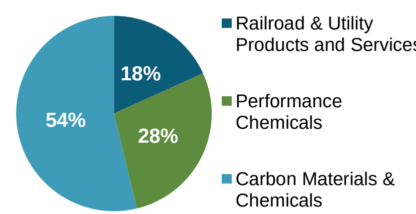

### Sales by Geography




### Sales by Segment




### Adj. EBITDA by Segment[1]




| 2018 Sales: $1,710M | 2018 Adj EBITDA: $222M |
|---|---|

1) Excludes corporate unallocated amounts

# Segment Overview

## Unique Product & Service Portfolio; Niche End Market Focus

| | Railroad and Utility Products and Services (RUPS) | Performance Chemicals (PC) | Carbon Materials and Chemicals (CMC) |
|---|---|---|---|
| **2018 Key Financials[1,2]** | • Net Sales: $635 Million<br>• Adj. EBITDA: $41 Million<br>• Adj. EBITDA Margin: 6.4% | • Net Sales: $420 Million<br>• Adj. EBITDA: $62 Million<br>• Adj. EBITDA Margin: 14.8% | • Net Sales: $655 Million<br>• Adj. EBITDA: $119 Million<br>• Adj. EBITDA Margin: 18.2% |
| **Highlights** | • Largest Supplier of Railroad Crossties in North America<br>• #1 Provider of Utility Poles in Eastern U.S.; #2 in U.S. | • Global Leader in Developing, Manufacturing/Marketing Wood Preservation Chemicals and Technologies | • Largest Supplier of Creosote to Railroad Industry in N.A.<br>• Vertically Integrated with RUPS |
| **Products & Services** | • Railroad Crossties<br>• Railroad Bridge Services<br>• Rail Joint Bars<br>• Utility Poles | • Wood Preservation Chemicals<br>• Coatings<br>• Water Repellants<br>• Pigmented Stains<br>• Fire Retardants | • Carbon Pitch<br>• Creosote<br>• Carbon Black Feedstock<br>• Naphthalene<br>• Phthalic Anhydride |
| **Market Position<br>Market Growth<br>Key Market Drivers** | • #1 or #2<br>• 1-3%<br>• Crosstie and Utility Pole Replacement Cycles | • #1<br>• 2-4%<br>• Repair & Remodel; Existing Home Sales | • #1 or #2<br>• 1-3%<br>• Global Industrial Growth<br>• Crosstie Replacement Cycle |

[1] Excludes corporate unallocated amounts
[2] Adjusted EBITDA margin defined as Adjusted EBITDA as a percentage of GAAP sales

KOPPERS

ZERO harm

# Zero Harm Culture

- **Committed to creating a Zero Harm culture that strives to place the well-being of our employees, the protection of the environment and the strength of our communities first at all times**
  - Requires a heightened awareness of process safety, product safety, environmental stewardship and security
  - Empowers each employee to ensure safe operations and to act to identify and correct unsafe situations in real time
- **Achieved certification in American Chemistry Council's Responsible Care® initiative across 18 global facilities and corporate headquarters**

# Zero Harm – Q1

## 37 of 47 operating locations free of OSHA recordables





| RUPS | UIP | RR | PC | CMC |
|---|---|---|---|---|
| Denver | Blackstone | Domino & Queen City | Christchurch | Follansbee |
| Florence | Bowman | L’Anse | Darlington | KJCC |
| Grafton | Chauncey | Orange | Geelong | Nyborg |
| Guthrie | Eutawville | Railroad Services | Griffin R&D | |
| Longford | Fulton | | Hubbell | |
| North Little Rock | Hainesport | | Marlow | |
| Roanoke | Jasper | | Millington Operations | |
| Takura | Leland | | Millington Transport. | |
| | Newsoms | | Mt. Gambier | |
| | North | | Rock Hill | |
| | Sweetwater | | | |
| | Vance | | | |

# Investment Highlights

# Leading Global Producer of Wood Preservation and Enhancement Products

**Products Play Critical Role In End Application; Often Have No Substitutes**

| | Product | Market Position |
|---|---|---|
| **Wood-Related** | North American Crosstie | #1 |
| | North American Wood Treating Chemicals | #1 |
| | North American Creosote | #1 |
| | Australian Creosote | #1 |
| | Australian Utility Poles | #1 |
| | Australian / New Zealand Wood Treating Chemicals | #1 |
| | South / Central American Wood Treating Chemicals | #1 |
| **Other** | Australian Carbon Pitch[1] | #1 |
| | North American Merchant Phthalic Anhydride[2] | #1 |

[1] Australian carbon pitch includes New Zealand market
[2] Reflects merchant market sales

# Vertically Integrated; Strategically Located Footprint

- Well positioned to capitalize on strong market presence; focusing on growth opportunities in wood preservation
- Significantly improved efficiency; consolidated coal tar distillation facilities from 11 to 4 (2014-2016)
- CMC processes coal tar into creosote consumed by RUPS for treatment of railroad crossties

**Vertically Integrated Operations**

Coal Tar Distillate (CMC)

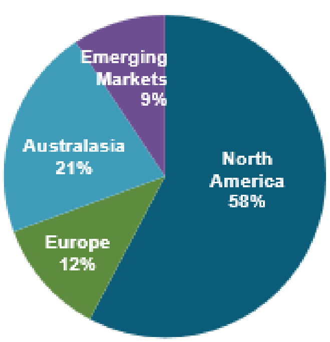
↓

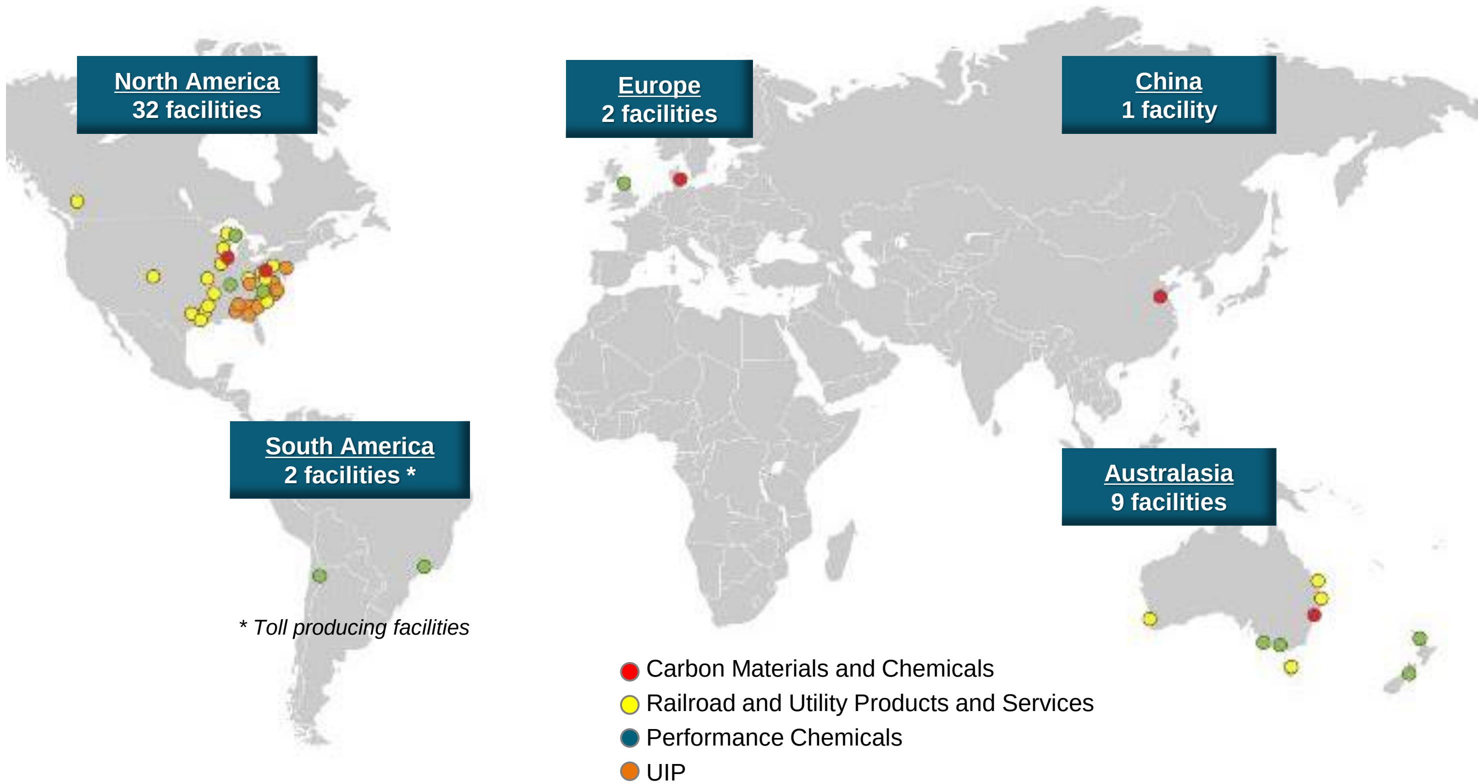
Creosote (CMC)

↓

Railroad Crossties (RUPS)

**2017 Sales by Geography**



# RUPS: Business Overview

| | |
|---|---|
| ***Key Products*** | • Railroad Crossties<br>• Utility Poles<br>• Crosstie and Pole Recovery & Disposal<br>• Rail Joint Bars<br>• Railroad Bridge Services |
| ***Competitive Advantages*** | • Vertically integrated; secured supply of wood-treatment solutions<br>✓ Creosote for treating railroad crossties from CMC<br>✓ Preservatives for utility pole treating from PC<br>• Offering full life-cycle solutions for crossties |

***Serving railroad customers in N.A., utility pole markets in U.S. and Australia***

# PC: Business Overview

| | | |
|---|---|---|
| ***Key Products*** | • Wood Preservation Chemicals<br>• Fire Retardants<br>• Coatings<br>• Water Repellants<br>• Pigmented Stains | ***Primary applications in decking, fencing, poles and pilings, construction lumber, outdoor structures*** |
| ***Competitive Advantages*** | • Strong intellectual property driven by industry leading R&D<br>• Integrated in-house production of copper intermediaries<br>• Vertically integrated supplier to UIP (utility poles) | |

1 Joint Center for Housing Studies of Harvard University: Leading Indicator of Remodeling Activity, October 2018

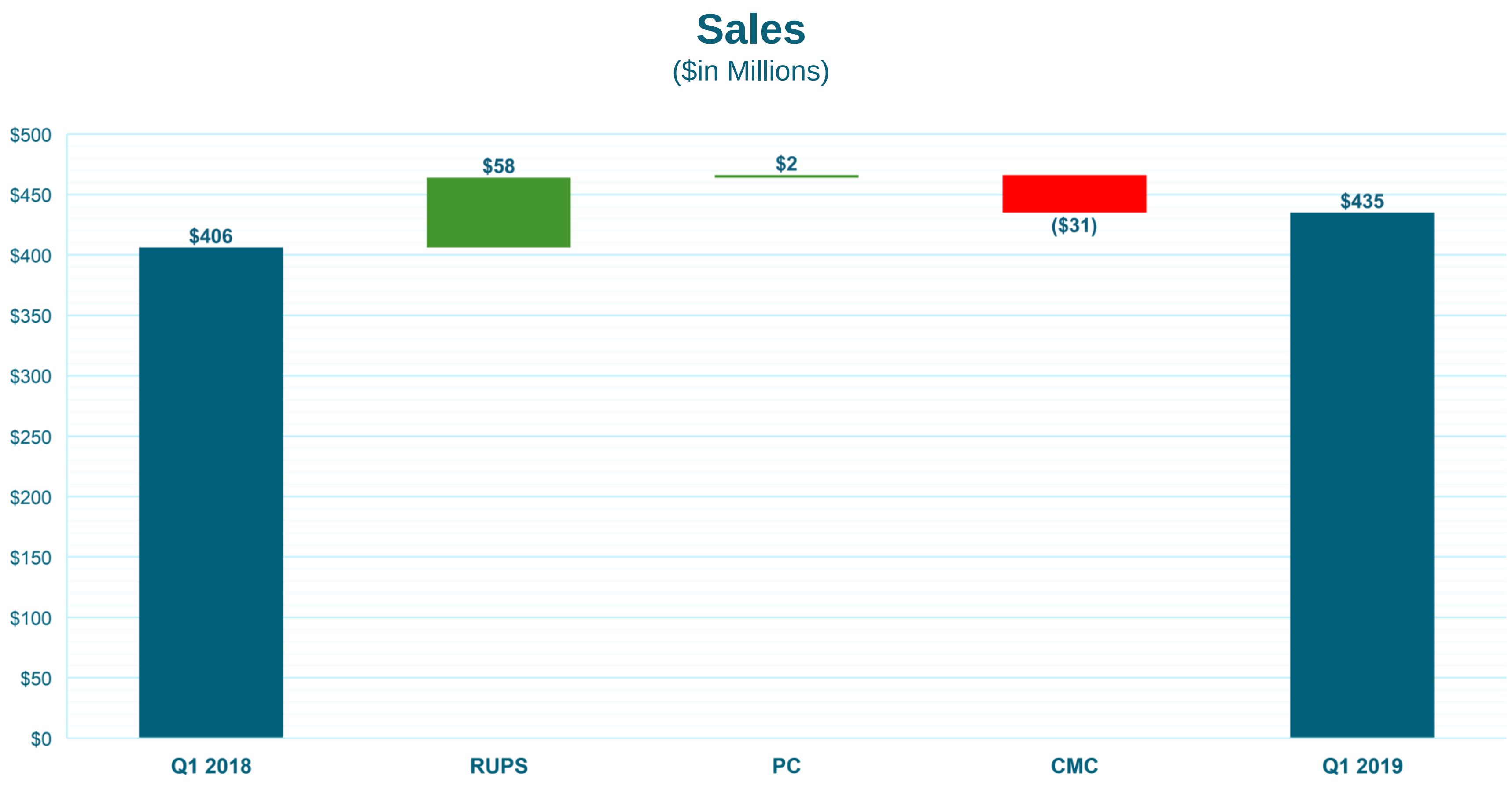
# CMC: Business Overview

| | |
|---|---|
| ***Key Products*** | • Creosote – wood-treatment preservative primarily for railroad crossties<br>• Carbon Black – tires and other rubber goods<br>• Carbon Pitch – aluminum and steel production<br>• Naphthalene – feedstock for phthalic anhydride; surfactant in concrete<br>• Phthalic Anhydride – plasticizers, polyester resins |
| ***Competitive Advantages*** | • Vertically integrated supplier to RUPS; efficient use of assets<br>• Provide security of supply through global footprint |

# Financial Overview

# Q1 2019 Results

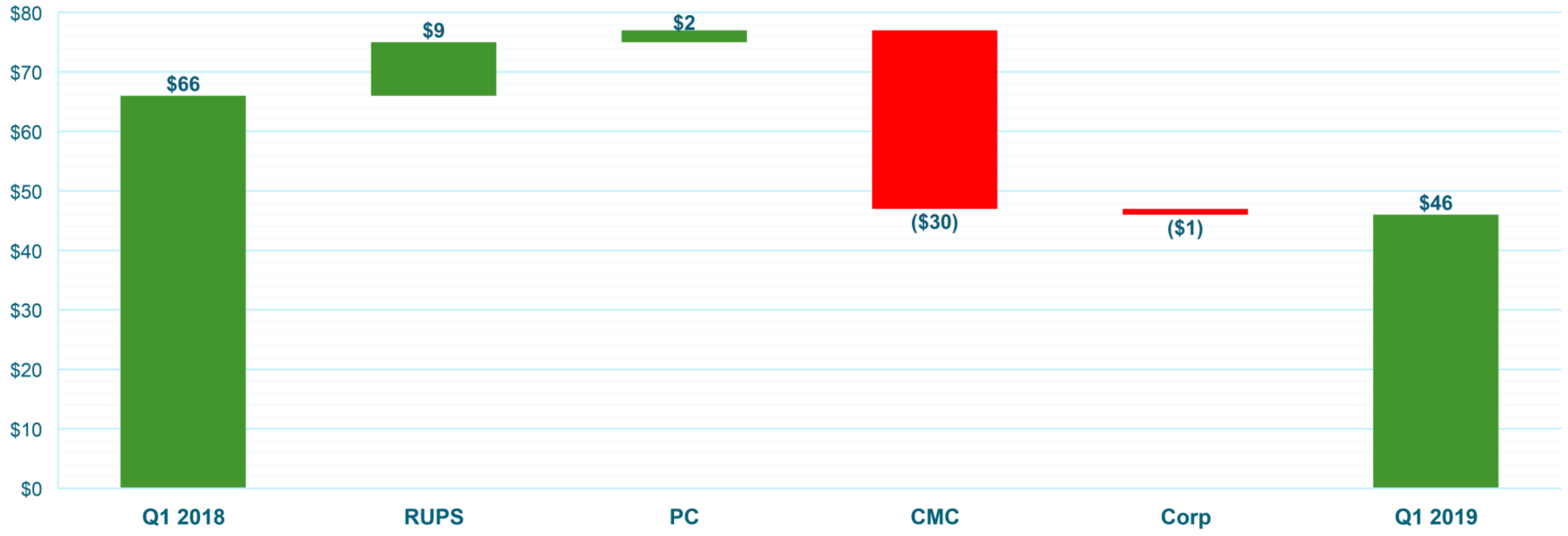
# Q1 Sales of $435M: *First-Quarter Record; Reflects Growth from RUPS Acquisitions*



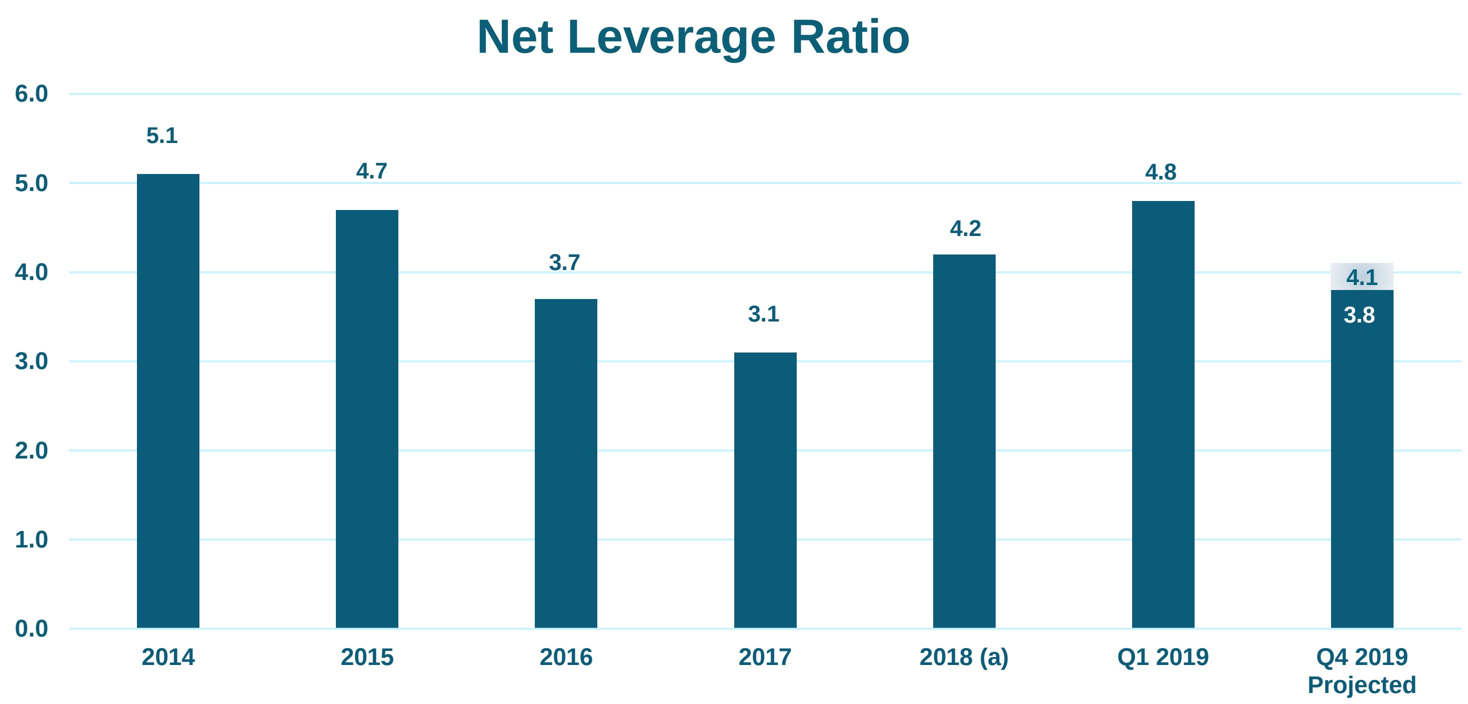
# Q1 Adjusted EBITDA of $46M:
## *Normalized CMC Profitability; Higher Mix from Wood-Based Businesses*

**Adjusted EBITDA**

($in Millions)



# Refocus on Debt Reduction:
## *$80M Minimum in 2019*

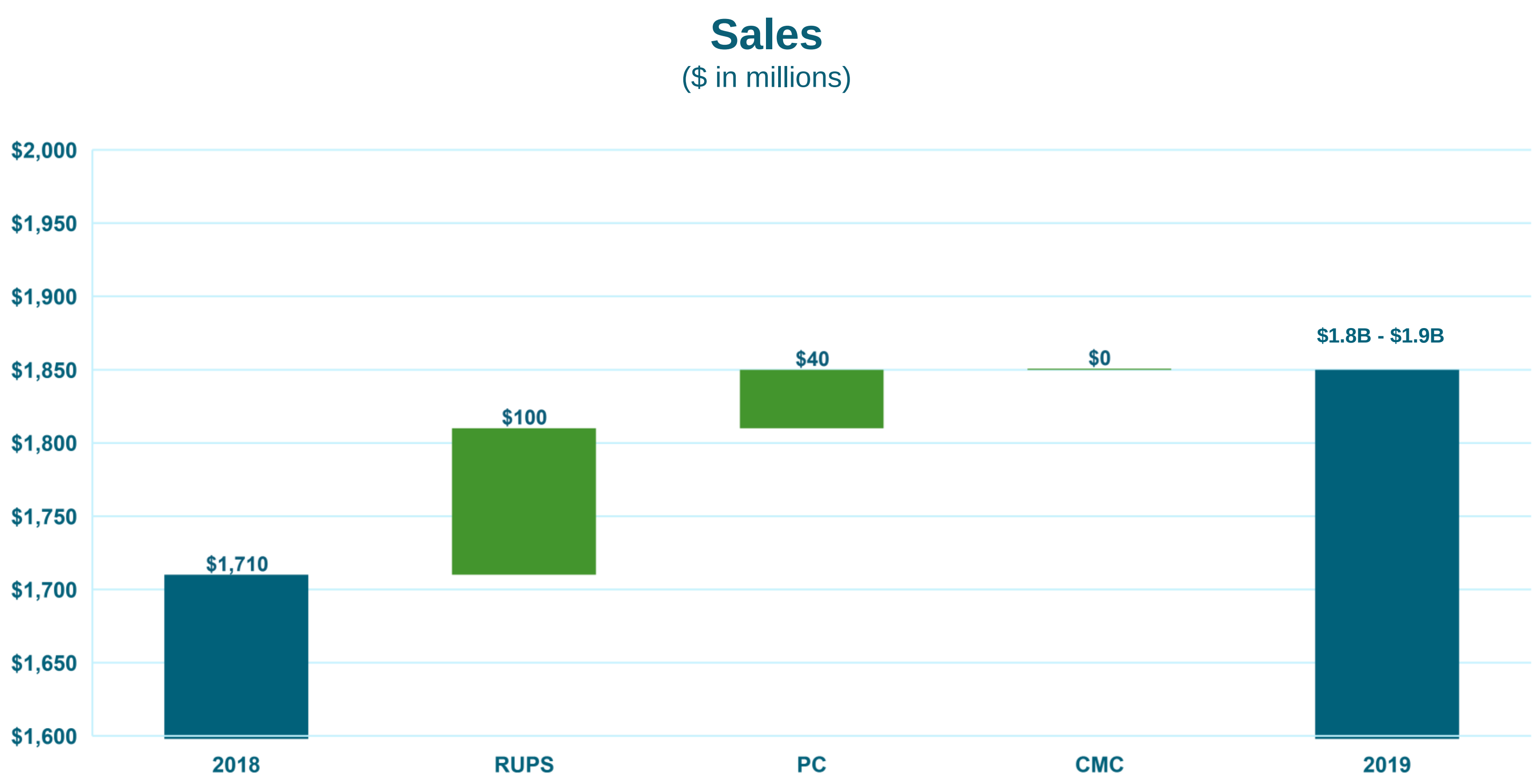



*(a) Pro-forma*

| **Net Leverage**<br>*LT Goal: 2x-3x* | • Proven track record of disciplined debt reduction (2015-2017)<br>• Net leverage ratio of 4.2x at 12/31/18 on pro-forma basis<br>• Projected net leverage to be in range of 3.8x to 4.1x at 12/31/19 |
|---|---|

# 2019 Guidance

# 2019 Sales Forecast of $1.8B-$1.9B:
## *Growth Driven by Wood-Based Businesses*

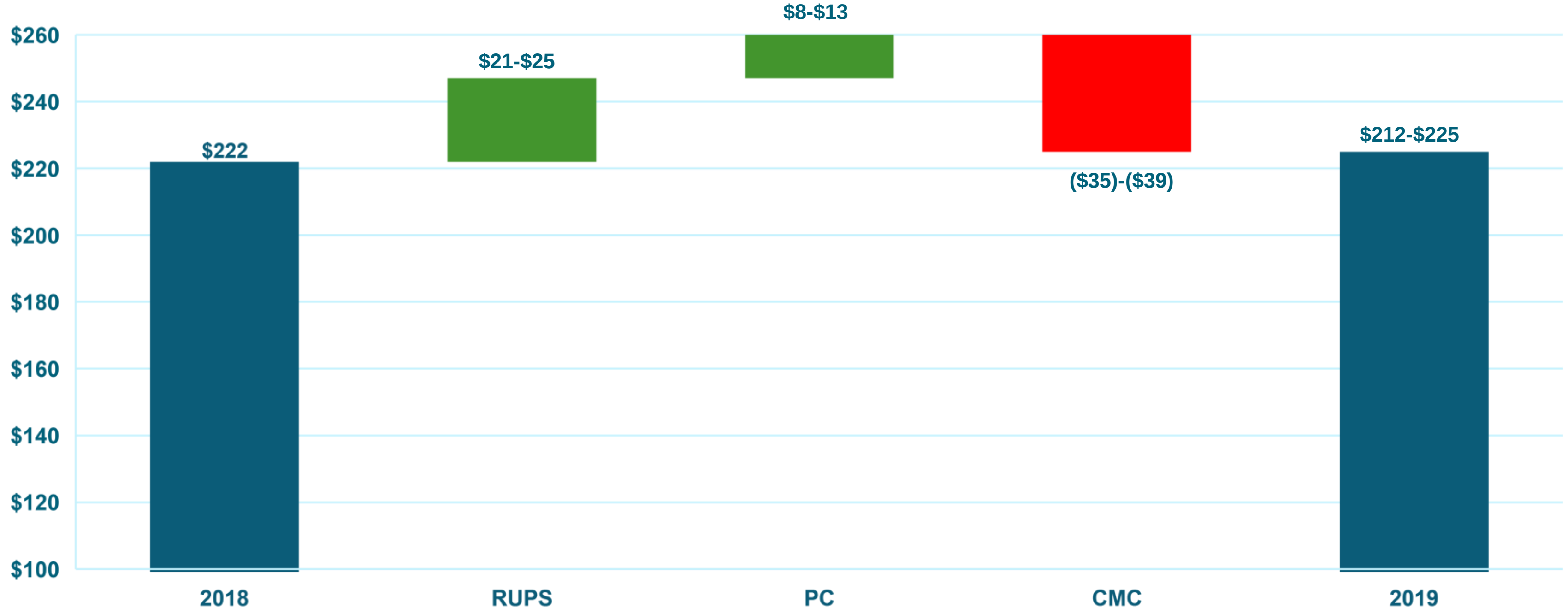


# Path To Improved Profitability

| | |
|---|---|
| **RUPS** | • Class I demand for treated ties improving from trough levels; working to increase availability of dry crossties ready for treatment; strong demand and favorable pricing environment in commercial crosstie markets<br>• Full-year of contribution from acquisitions<br>• Higher volumes; better production utilization; margin expansion |
| **PC** | • Top-line benefiting from strong customer demand, share gains and price realization<br>• Capacity expansion on track for Q2 completion; expect year-over-year savings from processing feedstock internally |
| **CMC** | • Completed Stickney naphthalene unit; $10M annual savings in 2019<br>• Expect year-over-year increase in creosote volumes; improved demand for carbon pitch in N.A.<br>• Stabilize profitability and cash flows at China subsidiary KJCC |
| **Integration Synergies & Strategic Initiatives** | • Expect to realize $10M in benefits in 2019<br>• Network optimization, i.e. crosstie and pole treating processes, logistics<br>• Commercial development opportunities<br>• SG&A efficiencies; raw materials and other cost savings |

# 2019 Adjusted EBITDA Forecast:
## *Improved Profitability in Wood-Based Businesses*

### Adjusted EBITDA*
($ in millions)




* Excluding special charges

# RUPS: What We Expect in 2019

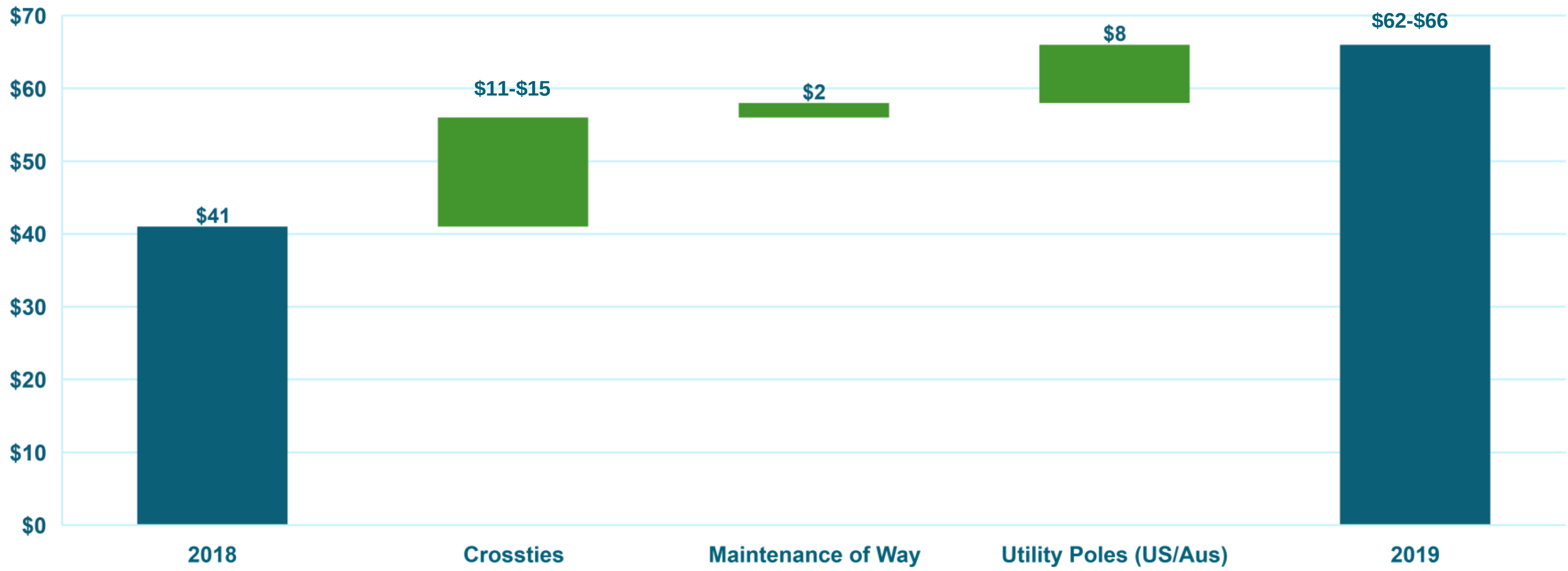
| | |
|---|---|
| **Opportunities** | • Improved year-over-year demand for treated crossties for track replacements<br>• Crosstie inventory remains at low levels; ~10-15% of Class I customers allowing boultonizing to accelerate drying time<br>• Integration synergies from network optimization, procurement/supply chain and logistics planning |
| **Challenges** | • Availability of untreated crossties remains limited; weather continues to constrain access/availability of lumber<br>• Class I railroads in various stages of ‘Precision Railroading’, i.e. evaluating overall network, capital spending, maintenance costs, etc. |
| **Market Outlook** | • Expect 2019 to reflect year-over-year volume/demand improvements after trough years 2017-2018<br>• Well-positioned to gain share with both Class I and commercial markets |

# 2019 Adjusted EBITDA Forecast: RUPS

## *Full-year of Acquisitions; Commercial Market Favorable; Higher Crosstie Procurement*

### Adjusted EBITDA*

($ in millions)

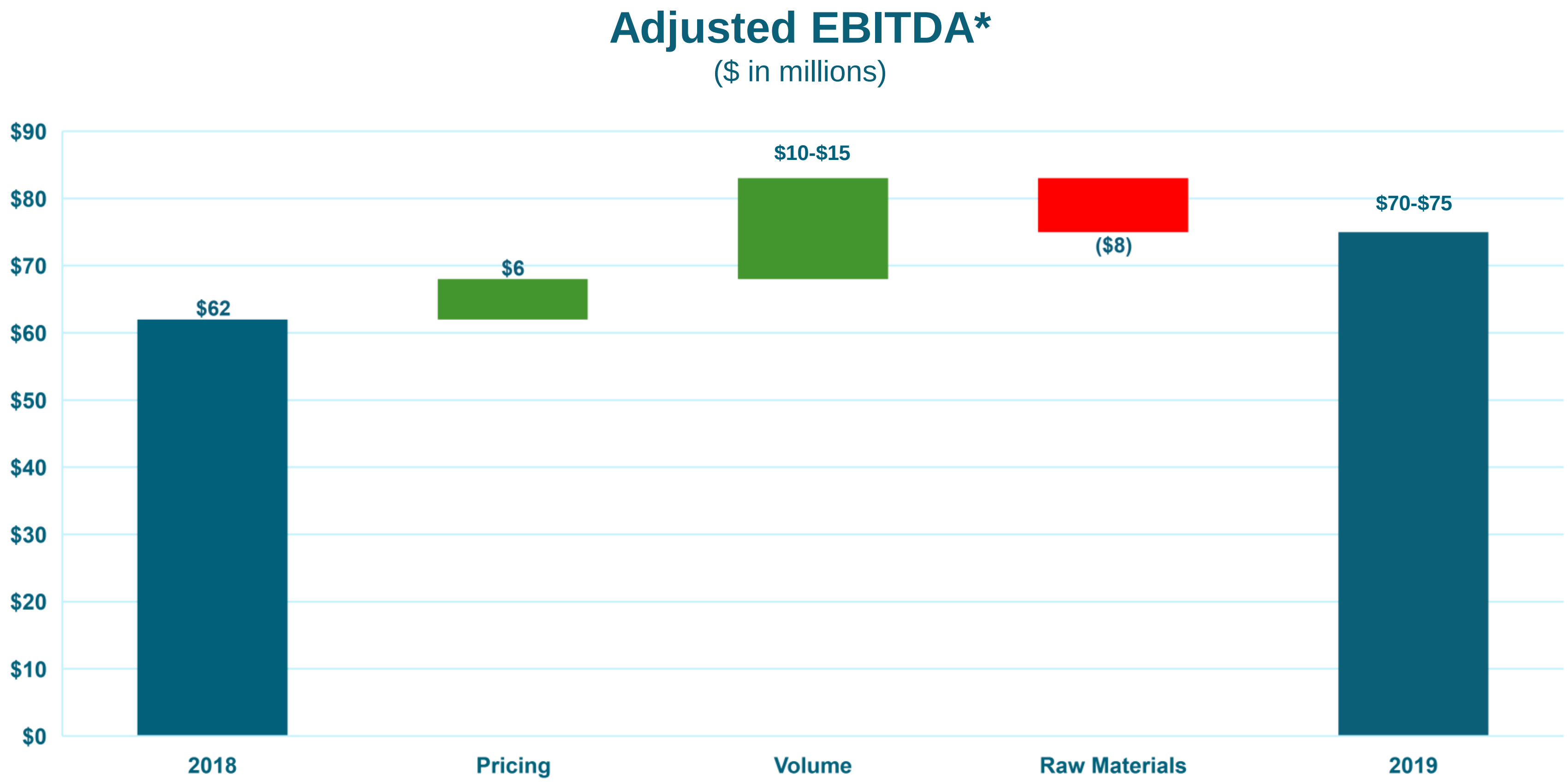



* Excluding special charges

# PC: What We Expect in 2019

| | |
|---|---|
| **Opportunities** | • Realizing price increases in 2019; additional pricing action in 2020<br>• Converting new customers; beginning to ship products in Q2; expect demand to be at full run rate in Q3<br>• Expect benefits related to new capacity for increased feedstock processing; on track for Q2 completion |
| **Challenges** | • Higher year-over-year copper costs<br>• Supply chain volatility for certain raw materials sourced from China |
| **Market Outlook** | • According to National Association of Realtors®, total existing-home sales declined in March by 4.9% from February; down 5.4% from a year ago<br>• Homeowner remodeling expenditure anticipated to slow from ~7% to 2.6% by first quarter of 2020; however, more favorable mortgage rates may boost home sales and refinancing to sustain remodeling activity<br>• Consumer Confidence Index partially rebounded in April to 129.2, compared with 124.2 in March; consumers expecting economy to continue growing |

# 2019 Adjusted EBITDA Forecast: PC
## *Volumes Will Drive Improvement*

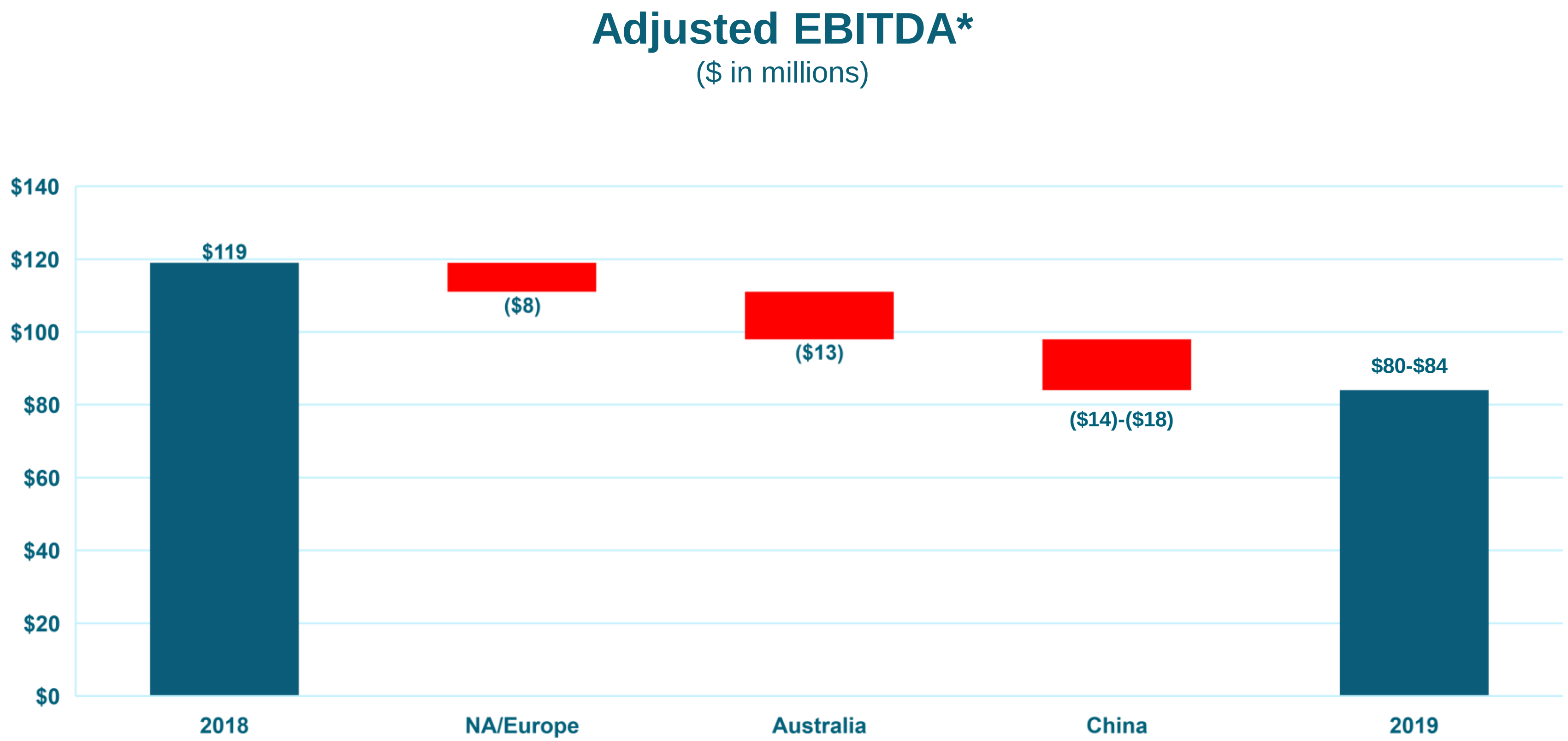



* Excluding special charges

# CMC: What We Expect in 2019

| | |
|---|---|
| **Opportunities** | • Aluminum customers in U.S. increasing capacity; streamlined cost structure provides margin opportunity for any incremental business<br>• Evaluate options related to KJCC/China subsidiary |
| **Challenges** | • Pricing pressure in certain regions as competitors attempt to gain market share<br>• Higher year-over-year raw material cost (coal tar) |
| **Market Outlook** | • Expect creosote demand to improve throughout year; contingent on RUPS having dry crosstie inventory available<br>• Carbon pitch demand/pricing continue to improve in U.S., partially offset by lower pricing in Europe |

# 2019 Adjusted EBITDA Forecast: CMC
## *Represents Return to Normalized Profitability*




* Excluding special charges

# Appendix

# Non-GAAP Measures and Guidance

*This presentation includes unaudited "non-GAAP financial measures" as defined in Regulation G under the Securities Exchange Act of 1934, including adjusted EBITDA and net leverage ratio. Koppers believes that the presentation of non-GAAP financial measures such as adjusted EBITDA and net leverage ratio provide information useful to investors in understanding the underlying operational performance of the company, its business and performance trends and facilitates comparisons between periods and with other corporations in similar industries. The exclusion of certain items permits evaluation and a comparison of results for ongoing business operations, and it is on this basis that Koppers management internally assesses the company's performance. In addition, the Board of Directors and executive management team use adjusted EBITDA as performance measures under the company's annual incentive plans.*

*Although Koppers believes that these non-GAAP financial measures enhance investors' understanding of its business and performance, these non-GAAP financial measures should not be considered an alternative to GAAP basis financial measures and should be read in conjunction with the relevant GAAP financial measure. Other companies in a similar industry may define or calculate these measures differently than the company, limiting their usefulness as comparative measures. Because of these limitations, these non-GAAP financial measures should not be considered in isolation from, or as substitutes for performance measures calculated in accordance with GAAP.*

*Koppers does not provide reconciliations of guidance for adjusted EBITDA and adjusted EPS to comparable GAAP measures, in reliance on the unreasonable efforts exception. Koppers is unable, without unreasonable efforts, to forecast certain items required to develop meaningful comparable GAAP financial measures. These items include restructuring, impairment, non-cash LIFO charges, acquisition-related costs, and non-cash mark-to-market commodity hedging that are difficult to predict in advance in order to include in a GAAP estimate and may be significant.*

*References to historical EBITDA herein means adjusted EBITDA, for which the company has provided calculations and reconciliations in the Appendix.*

# Unaudited Segment Information

| | Three Months Ended March 31, 2019 | Three Months Ended March 31, 2018 |
|---|---|---|
| *(Dollars in millions)* | | |
| Net sales: | | |
| Railroad and Utility Products and Services | $ 166.1 | $ 108.4 |
| Performance Chemicals | 99.0 | 97.4 |
| Carbon Materials and Chemicals | 169.8 | 200.3 |
| Total | $ 434.9 | $ 406.1 |
| Operating profit (loss): | | |
| Railroad and Utility Products and Services | $ 8.7 | $ 1.1 |
| Performance Chemicals | 12.8 | 5.6 |
| Carbon Materials and Chemicals | 7.4 | 37.2 |
| Corporate Unallocated | (0.5) | (0.6) |
| Total | $ 28.4 | $ 43.3 |
| Operating profit margin: | | |
| Railroad and Utility Products and Services | 5.2% | 1.0% |
| Performance Chemicals | 12.9% | 5.7% |
| Carbon Materials and Chemicals | 4.4% | 18.6% |
| Total | 6.5% | 10.7% |
| Depreciation and amortization: | | |
| Railroad and Utility Products and Services | $ 4.8 | $ 3.0 |
| Performance Chemicals | 4.9 | 4.4 |
| Carbon Materials and Chemicals | 4.9 | 4.4 |
| Total | $ 14.6 | $ 11.8 |
| Adjusted EBITDA(1): | | |
| Railroad and Utility Products and Services | $ 14.3 | $ 5.4 |
| Performance Chemicals | 15.5 | 13.8 |
| Carbon Materials and Chemicals | 16.7 | 47.0 |
| Corporate Unallocated | (0.5) | 0.0 |
| Total | $ 46.0 | $ 66.2 |
| Adjusted EBITDA margin(2): | | |
| Railroad and Utility Products and Services | 8.6% | 5.0% |
| Performance Chemicals | 15.7% | 14.2% |
| Carbon Materials and Chemicals | 9.8% | 23.5% |
| Total | 10.6% | 16.3% |

(1) The tables below describe the adjustments to EBITDA for the quarters ended March 31, 2019 and 2018, respectively.

(2) Adjusted EBITDA as a percentage of GAAP sales.

# Unaudited Reconciliation of Operating Profit to EBITDA and Adjusted EBITDA*

| | Three months ended March 31,2019 | | | | |
|---|---|---|---|---|---|
| | | | | Corporate | |
| | RUPS | PC | CMC | Unallocated | Consolidated |
| Operating profit (loss) | $ 8.7 | $ 12.8 | $ 7.4 | $ (0.5) | $ 28.4 |
| Other income (loss) | (0.2) | 0.9 | (0.1) | 0.0 | 0.6 |
| Depreciation and amortization | 4.8 | 4.9 | 4.9 | 0.0 | 14.6 |
| Depreciation in impairment and restructuring charges | 0.0 | 0.0 | 0.2 | 0.0 | 0.2 |
| EBITDA with noncontrolling interest | $ 13.3 | $ 18.6 | $ 12.4 | $ (0.5) | $ 43.8 |
| Unusual items impacting EBITDA: | | | | | |
| CMC restructuring | 0.0 | 0.0 | 4.3 | 0.0 | 4.3 |
| Non-cash LIFO expense | 1.0 | 0.0 | 0.0 | 0.0 | 1.0 |
| Mark-to-market commodity hedging | 0.0 | (3.1) | 0.0 | 0.0 | (3.1) |
| Adjusted EBITDA | $ 14.3 | $ 15.5 | $ 16.7 | $ (0.5) | $ 46.0 |
| *Adj. EBITDA % of Consolidated Adj. EBITDA (excluding corporate unallocated)* | *30.8%* | *33.3%* | *35.9%* | | |

**A reconciliation of segment net income to adjusted segment EBITDA is not available without unreasonable efforts as we do not measure net income at the segment level or use it as a measure of operating performance.*

# Unaudited Reconciliation of Operating Profit to EBITDA and Adjusted EBITDA*

| | Three months ended March 31,2018 | | | | |
|---|---|---|---|---|---|
| | | | | Corporate | |
| | RUPS | PC | CMC | Unallocated | Consolidated |
| Operating profit (loss) | $ 1.1 | $ 5.6 | $ 37.2 | $ (0.6) | $ 43.3 |
| Other income (loss) | (0.3) | 0.3 | (0.4) | 0.6 | 0.2 |
| Depreciation and amortization | 3.0 | 4.4 | 4.4 | 0.0 | 11.8 |
| Depreciation in impairment and restructuring charges | 0.0 | 0.0 | 1.4 | 0.0 | 1.4 |
| EBITDA with noncontrolling interest | $ 3.8 | $ 10.3 | $ 42.6 | $ 0.0 | $ 56.7 |
| Unusual items impacting EBITDA: | | | | | |
| CMC restructuring | 0.0 | 0.0 | 4.1 | 0.0 | 4.1 |
| RUPS treating plant closures | 0.3 | 0.0 | 0.0 | 0.0 | 0.3 |
| Non-cash LIFO expense | 1.3 | 0.0 | 0.3 | 0.0 | 1.6 |
| Mark-to-market commodity hedging | 0.0 | 3.5 | 0.0 | 0.0 | 3.5 |
| Adjusted EBITDA | $ 5.4 | $ 13.8 | $ 47.0 | $ 0.0 | $ 66.2 |
| *Adj. EBITDA % of Consolidated Adj. EBITDA (excluding corporate unallocated)* | *8.2%* | *20.8%* | *71.0%* | | |

**A reconciliation of segment net income to adjusted segment EBITDA is not available without unreasonable efforts as we do not measure net income at the segment level or use it as a measure of operating performance.*

# Unaudited Reconciliation of Net Income to EBITDA and Adjusted EBITDA*

*(In millions)*

| | Three Months Ended March 31, 2019 | Three Months Ended March 31, 2018 |
|---|---|---|
| Net income | $ 12.4 | $ 23.7 |
| Interest expense | 16.7 | 10.5 |
| Depreciation and amortization | 14.6 | 11.8 |
| Depreciation in impairment and restructuring charges | 0.2 | 1.4 |
| Income taxes | (0.1) | 9.2 |
| Loss from discontinued operations | 0.0 | 0.1 |
| EBITDA with noncontrolling interests | 43.8 | 56.7 |
| Unusual items impacting net income | | |
| Impairment, restructuring and plant closure costs | 4.3 | 4.4 |
| Non-cash LIFO expense | 1.0 | 1.6 |
| Mark-to-market commodity hedging | (3.1) | 3.5 |
| Total adjustments | 2.2 | 9.5 |
| Adjusted EBITDA | $ 46.0 | $ 66.2 |

**A reconciliation of segment net income to adjusted segment EBITDA is not available without unreasonable efforts as we do not measure net income at the segment level or use it as a measure of operating performance.*

# Unaudited Reconciliation of Operating Profit to EBITDA and Adjusted EBITDA*

| | Year Ended December 31, | | | | |
|---|---|---|---|---|---|
| | 2014 | 2015 | 2016 | 2017 | 2018 |
| Net income | $ (39.4) | $ (76.0) | $ 27.7 | $ 30.5 | $ 29.2 |
| Interest expense including refinancing | 39.1 | 50.7 | 50.8 | 55.8 | 56.3 |
| Depreciation and amortization | 44.0 | 59.0 | 60.5 | 62.8 | 54.8 |
| Income tax provision | 34.1 | (4.2) | 11.4 | 29.0 | 26.0 |
| Income from discontinued operations | (0.6) | 0.1 | (0.6) | 0.8 | (0.4) |
| EBITDA | 77.2 | 29.6 | 149.8 | 178.9 | 165.9 |
| Unusual items impacting net income: | | | | | |
| Impairment, restructuring and plant closure | 30.8 | 54.8 | 33.2 | 15.9 | 23.5 |
| Non-cash LIFO expense (benefit) | 1.2 | 0.2 | (9.5) | (0.5) | 12.6 |
| Mark-to-market commodity hedging | - | 0.7 | (1.7) | (3.5) | 6.9 |
| Acquisition and inventory step-up costs | 7.1 | - | (1.0) | - | 6.0 |
| CMC goodwill impairment | - | 67.2 | - | - | 3.1 |
| Sales of businesses and assets | - | (2.3) | 1.7 | - | 2.0 |
| Contract buyout | - | - | - | - | 1.6 |
| Reimbursement of environmental costs | - | - | (2.7) | (0.4) | 0.0 |
| Pension settlement charge | - | - | 4.4 | 10.0 | 0.0 |
| Adjusted EBITDA with noncontrolling interests | $ 116.3 | $ 150.2 | $ 174.2 | $ 200.4 | $ 221.6 |
| Proforma adjusted EBITDA from acquisitions | 50.8 | 0.0 | 0.0 | 0.0 | 4.1 |
| Proforma adjusted EBITDA with noncontrolling interests | $ 167.1 | $ 150.2 | $ 174.2 | $ 200.4 | $ 225.7 |

**A reconciliation of segment net income to adjusted segment EBITDA is not available without unreasonable efforts as we do not measure net income at the segment level or use it as a measure of operating performance.*

# Unaudited Reconciliation of Total Debt To Net Debt and Net Leverage Ratio

*(In millions)*

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | | | | | *Year ended December 31,* | |
| | | | *2016* | | *2015* | | *Pro-Forma 2014* |
| Total Debt | | $ | 662.4 | $ | 722.3 | $ | 850.5 |
| Less: Cash | | | 20.8 | | 21.8 | $ | - |
| Net Debt | | $ | 641.6 | $ | 700.5 | $ | 850.5 |
| Adjusted EBITDA | | $ | 174.2 | $ | 150.2 | $ | 167.1 |
| Net Leverage Ratio | | | 3.7 | | 4.7 | | 5.1 |

*(In millions)*

| | | | | | | |
|---|---|---|---|---|---|---|
| | | | | | *Year ended December 31,* | |
| | | *2018* | | *Proforma 2018* | | *2017* |
| Total Debt | $ | 990.4 | $ | 990.4 | $ | 677.0 |
| Less: Cash | | 40.6 | | 40.6 | | 60.3 |
| Net Debt | $ | 949.8 | $ | 949.8 | $ | 616.7 |
| Adjusted EBITDA | $ | 221.6 | $ | 225.7 | $ | 200.4 |
| Net Leverage Ratio | | 4.3 | | 4.2 | | 3.1 |

# Unaudited Reconciliation of Total Debt To Net Debt and Net Leverage Ratio

| *(In millions)* | | *Twelve months ended March 31, 2019* |
|---|---|---|
| Total Debt | $ | 1,012.7 |
| Less: Cash | | 38.1 |
| Net Debt | $ | 974.6 |
| Adjusted EBITDA | $ | 201.5 |
| Net Leverage Ratio | | 4.8 |

| *(In millions)* | | *Twelve months ended March 31, 2019* |
|---|---|---|
| Net income | $ | 18.0 |
| Interest expense including refinancing | | 62.2 |
| Depreciation and amortization | | 56.4 |
| Income tax provision | | 16.8 |
| Income from discontinued operations | | (0.5 |
| EBITDA | | 152.9 |
| Unusual items impacting net income: | | |
| Impairment, restructuring and plant closure | | 23.5 |
| Non-cash LIFO expense | | 12.0 |
| Mark-to-market commodity hedging | | 0.3 |
| UIP inventory purchase accounting adjustment | | 6.0 |
| Acquisition closing costs | | 3.1 |
| Contract buyout | | 1.6 |
| Sale of land | | 1.1 |
| Sale of specialty chemicals business | | 1.0 |
| Adjusted EBITDA with noncontrolling interests | $ | 201.5 |
| Proforma adjusted EBITDA from acquisitions | | 0.0 |
| Proforma adjusted EBITDA with noncontrolling interests | $ | 201.5 |

**Koppers Holdings Inc.**
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Koppers is an integrated global provider of treated wood products, wood treatment chemicals and carbon compounds for the railroad, specialty chemical, utility, residential lumber, agriculture, aluminum, steel, rubber, and construction industries. Headquartered in Pittsburgh, Pennsylvania, we serve our customers through a comprehensive global manufacturing and distribution network, with facilities located in North America, South America, Australasia, China and Europe.

**Stock Exchange Listing**
NYSE: KOP

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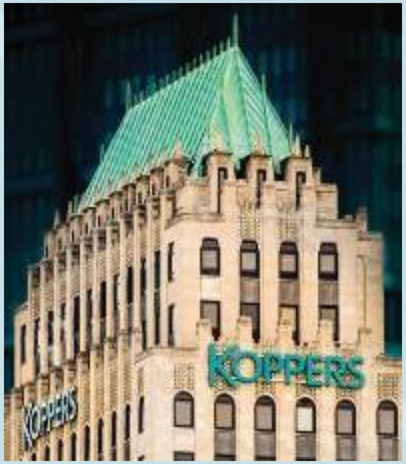


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