Advanced Emissions Solutions, Inc.

*Advancing Cleaner Energy*

# First Quarter 2019 Results Call

*May 7, 2019*

# SAFE HARBOR

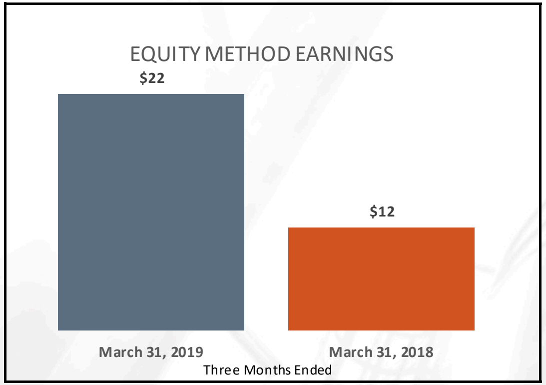
This presentation includes forward-looking statements within the meaning of Section 21E of the Securities Exchange Act of 1934, which provides a "safe harbor" for such statements in certain circumstances. The forward-looking statements include statements or expectations regarding future cash flows from refined coal ("RC"); potential transactions with tax-equity investors and estimated tonnage associated with such potential transaction; required capital investment to transition existing facilities to operating status; opportunities for optimizing operations, improving integration and other potential growth opportunities; and evaluation of additional ways to return capital to stockholders. These statements are based on current expectations, estimates, projections, beliefs and assumptions of our management. Such statements involve significant risks and uncertainties. Actual events or results could differ materially from those discussed in the forward-looking statements as a result of various factors, including but not limited to, changes and timing in laws, regulations, IRS interpretations or guidance, accounting rules and any pending court decisions, legal challenges to or repeal of them; changes in prices, economic conditions and market demand; the ability of the RC facilities to produce and sell coal that qualifies for tax credits; the timing, terms and changes in contracts for RC facilities, or failure to lease or sell RC facilities; impact of competition; availability, cost of and demand for alternative tax credit vehicles and other technologies; technical, start-up and operational difficulties; availability of raw materials; customer demand for our products; competition within the industries in which we operate; availability of opportunities to further grow our business; loss of key personnel; and other factors discussed in greater detail in our filings with the SEC. You are cautioned not to place undue reliance on such statements and to consult our SEC filings for additional risks and uncertainties that may apply to our business and the ownership of our securities. Our forward-looking statements are presented as of the date made, and we disclaim any duty to update such statements unless required by law to do so.

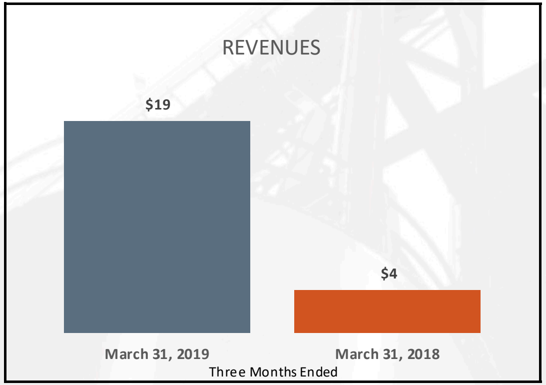
# FIRST QUARTER 2019 HIGHLIGHTS

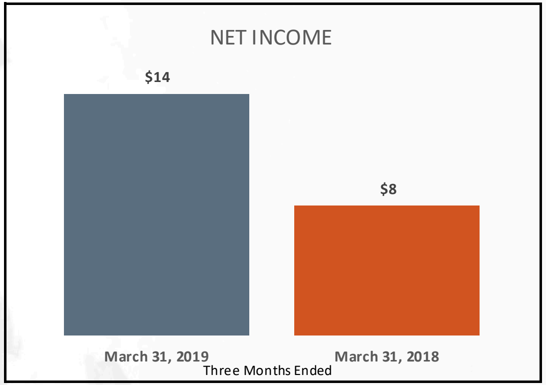
- Obtained separate third party tax equity investors for an RC facility in January 2019 that was previously in installation phase; the RC facility is royalty bearing;
- Based on 20 invested RC facilities as of March 31, 2019 and cash distributions occurring in the three months ended March 31, 2019, the Company's expected future net RC cash flows to ADES are projected to be between $200 million and $225 million through the end of 2021;
- Tinuum distributions to ADES increased by 45% and totaled $19.5 million during the first quarter of 2019;
- Recognized PGI segment revenue of $14.6 million significantly driven by Consumables related to the Carbon Solutions acquisition;
- Cash position increased by $2.1 million compared to December 31, 2018, after debt-related interest and principal payments of $7.3 million; Ended with $25.9 million of cash and cash equivalents and restricted cash as of March 31, 2019;
- Continued quarterly dividend; declared first quarter dividend of $0.25 per share, paid in March 2019, and declared 2019 second quarter dividend payable on June 7, 2019 to stockholders of record as of business close on May 20, 2019;
- Returned $5.3 million to shareholders during the three months ended March 31, 2019 through share repurchases and dividends declared;
- Net income for the three months ended March 31, 2019 of $14.4 million or $0.78 per diluted share;

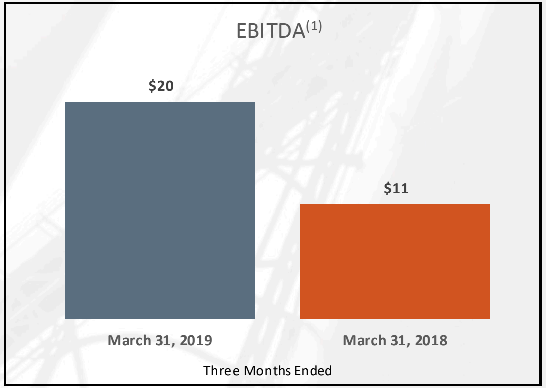
# FINANCIALS

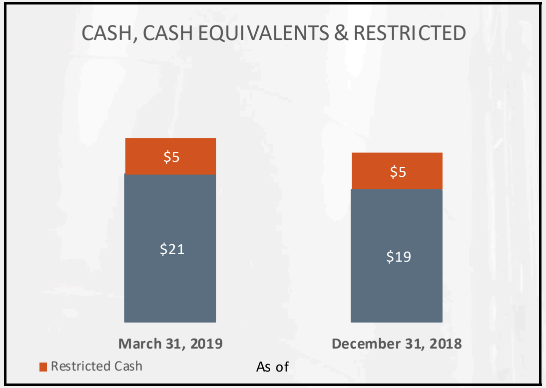
# FINANCIAL HIGHLIGHTS

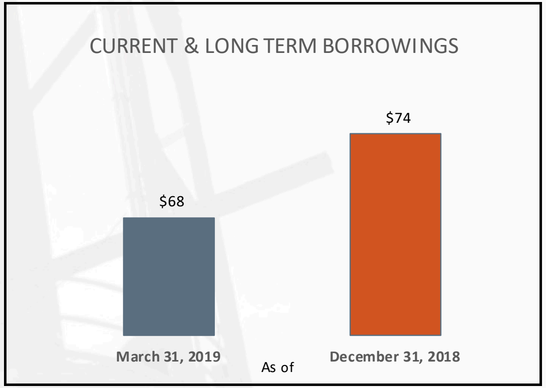



(1) EBITDA is a non-GAAP measure. See Appendix for definitions and reconciliations.

# REFINED COAL

# REFINED COAL ENVIRONMENT

The refined coal business is proven and yields many benefits to utilities, investors and the environment, and while the outlook has improved, there remain hurdles to overcome

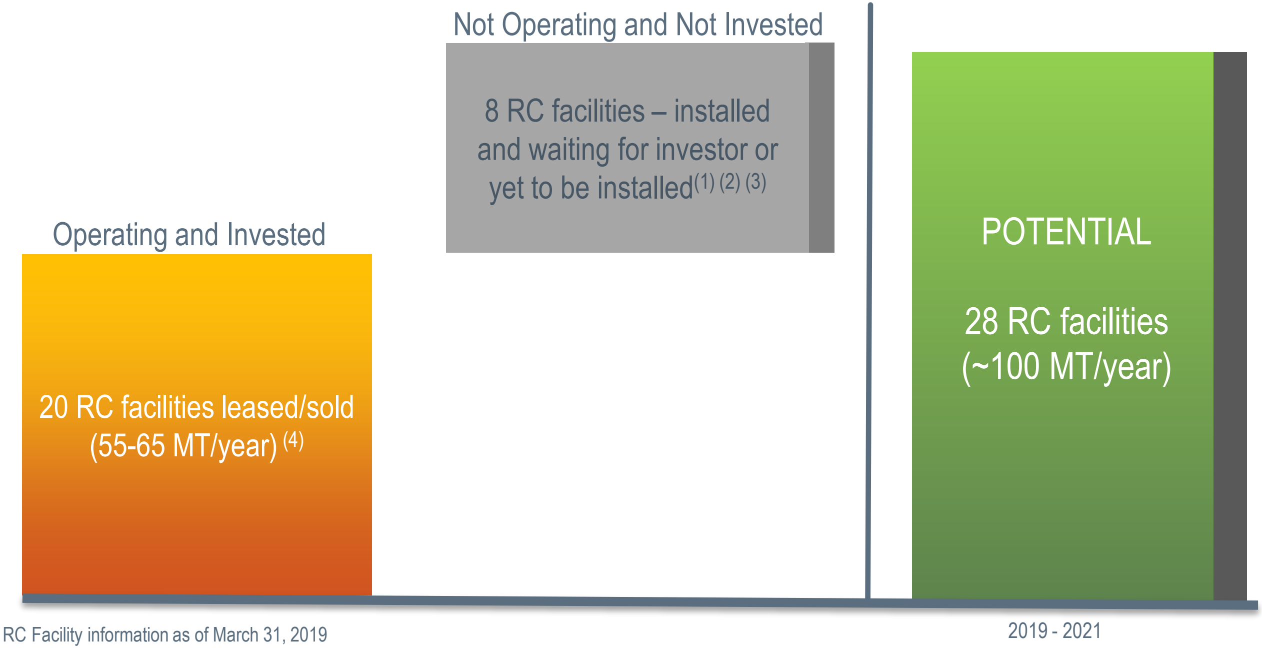
A significant number of major public and private companies have invested in RC Tax Equity since its inception

**There are <u>benefits</u> *if* <u>hurdles</u> can be overcome**

| BENEFITS | HURDLES |
| --- | --- |
| Support Reliable Cleaner Energy | Coal Reputation and Political Stigma |
| Federal Tax Reform Clarity | *Federal Tax Reform* |
| IRS Clarity | *IRS Ambiguity* |
| Net Income and EPS Improvement | Accounting Treatment |
| Uniquely Strong Cash Returns & Rapid Return Of Capital | Investor Business Priorities |

# REFINED COAL FACILITIES TODAY AND TOMORROW

## FULL-TIME OPERATIONS ROADMAP



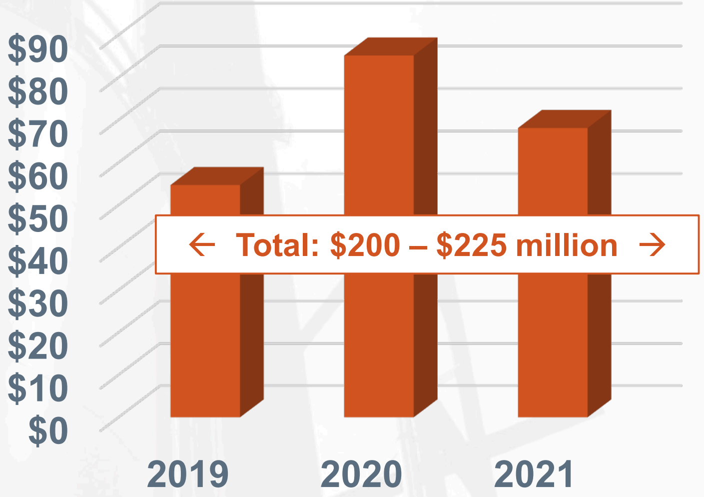

(1) Certain facilities would require capital investment to transition to operating status
(2) Two facilities were in the engineering and construction phase
(3) One facility that is not operating was placed in service in 2009 and available Section 45 tax credit generation ability for this facility will expire during the year ended 2019
(4) One facility that is operating was placed in service in 2009 and available Section 45 tax credit generation ability for this facility will expire during the year ended 2019

# Future Cash Flows for ADES & 2019 Priorities

# EXPECTED FUTURE RC CASH FLOWS

- Based on 20 invested facilities as of March 31, 2019 and includes all net RC cash flows of ADES [(1)]
- Results in expected future net RC cash flows of $200 million to $225 million to ADES in total through 2021 [(2)]
- Each additional refined coal facility could add between $5-7 million annually to ADES [(3)]

**EXPECTED FUTURE CASH FLOWS FROM RC BUSINESS [(1)]**
*(in millions)*




(1) Net projected RC cash flows include the impact of all expected Tinuum distributions and royalty payments offset by the Company's federal and state tax payments as well as 453A interest payments
(2) The expectation is based on the following four key assumptions: 1) Tinuum Group continues to not operate retained facilities; 2) Tinuum Group does not have material unplanned CapEx or unusual operating expenses based on expectations as of the balance sheet date; 3) tax equity lease renewals are not terminated or repriced; and 4) coal-fired generation remains consistent
(3) Estimates based on coal-fired utility that burns 4.0 million tons per year

# GROWTH OPPORTUNITIES

TODAY | TOMORROW

Continue to gain market share and margin

Pursue higher margin and higher growth

### Mercury Removal

- Positioned for continued profitable growth due to maintained market leadership and stable demand as prices stabilize
- Gain additional share through premium products, cost advantage and RC transition

### Municipal Water

- Carbon Solutions can and does compete, albeit minimally, without any incremental plant investment
- However, additional feedstock sourcing is necessary

### Broader Water Market

- Opportunity to leverage Carbon Solutions' best-in-class production facility and make investments to capture broader commercial and consumer market

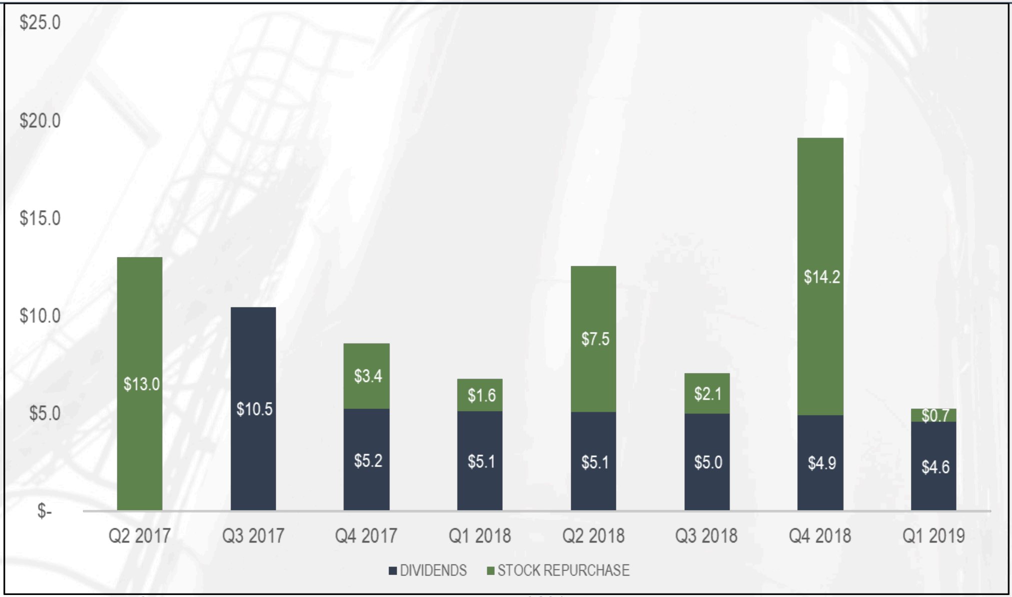
### Adjacent Segments & International Expansion

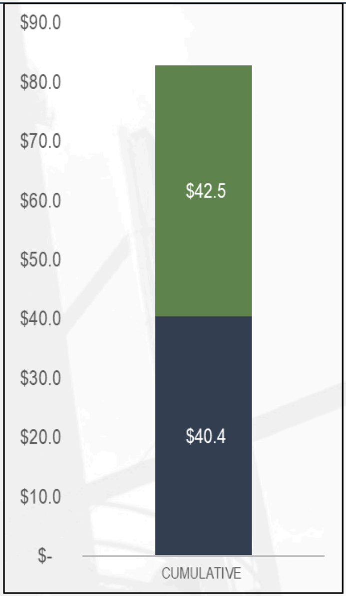
- Regenerated Carbon
- Chemicals and Food
- International Mercury Control

CURRENT PLANT CONFIGURATION | INVESTMENT NEEDED

# RETURN OF CAPITAL

- **Since the start of the Capital Allocation program [1], the Company has paid $40.4 million in dividends and utilized capital of $42.5 million to repurchase shares**
- **Since March 31, 2017, the Company has returned approximately $3.75 per share to its shareholders[2]; the stock price for the same period has increased from $9.54 as of March 31, 2017 to $11.56 as of March 31, 2019**
- **As of March 31, 2019, dividend yield was ~9% on an annualized basis**




(1) The Company started its current Capital Allocation program in the second quarter of 2017.
(2) Return was calculated based on shares outstanding as of March 31, 2017.

# 2019 PRIORITIES

## INCREASE AND OPTIMIZE REFINED COAL NET CASH FLOWS:

Add Investors:

- Nurture current & add additional sales channels
- Leverage improving refined coal tax equity market and investor clarity as a result of tax reform

Optimization:

- Maximize operational performance to produce RC and further develop customer relationships to ensure retention of RC customers
- Optimize resources at ADES to support Tinuum and public platform while also reducing expenses

## INTEGRATION AND GROWTH:

Integration:

- Efficiently combine the teams, expertise, operations and product suite of Carbon Solutions

Growth:

- Immediately address market share capture in North American PAC market, as well as evaluate and pursue adjacent market opportunities in Water

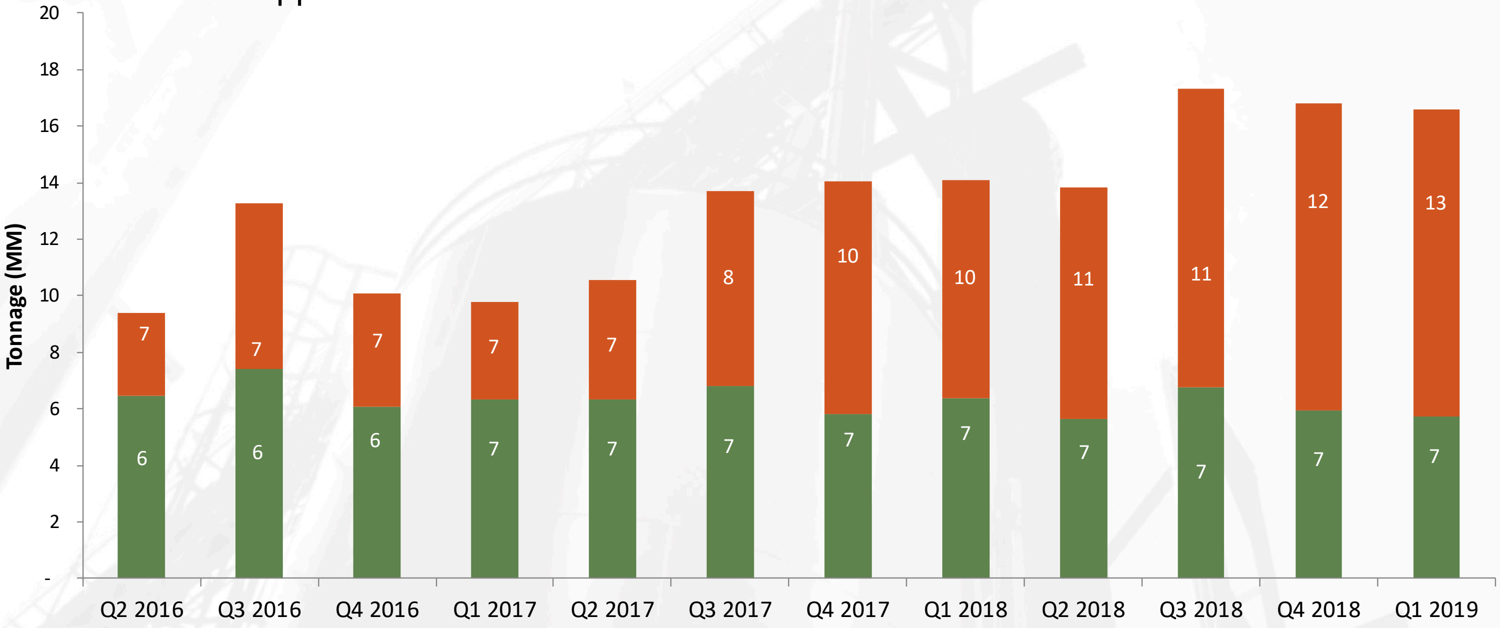
## RETURN CAPITAL TO SHAREHOLDERS:

Evaluate options and execute on continued progress for additional return of capital to shareholders, including:

- Stock repurchases (open market and/or one-time tender offers)
- Dividends (one-time and/or incremental recurring)

# APPENDIX

# Appendix A: OPERATING TONS: ROYALTY VS. NON-ROYALTY




| Three Month Ended March 31, 2019 | Operating Tons | | QTD - Total |
|---|---|---|---|
| | Royalty | Non-Royalty | |
| Tonnage (1) | 10,862 | 5,731 | 16,593 |
| Count (#) (2) | 13 | 7 | 20 |

*Note: Numbers within bar graph represent the number of facilities per category as of the end of each quarter presented*

*(1) Tonnage information is based upon RC production for the three months ended March 31, 2019 (in thousands)*

*(2) Counts are based upon the number of facilities of which a royalty has been earned during the period*

# Appendix B: 10-Q Balance Sheet[(1)]

| *(in thousands, except share data)* | As of March 31, 2019 | As of December 31, 2018 |
|---|---|---|
| **ASSETS** | | |
| Current assets: | | |
| Cash, cash equivalents and restricted cash | $ 20,670 | $ 18,577 |
| Receivables, net | 7,772 | 9,554 |
| Receivables, related parties | 4,220 | 4,284 |
| Inventories | 18,053 | 21,791 |
| Prepaid expenses and other assets | 5,504 | 5,570 |
| Total current assets | 56,219 | 59,776 |
| Restricted cash, long-term | 5,195 | 5,195 |
| Property, plant and equipment, net of accumulated depreciation of $2,830 and $1,499, respectively | 42,423 | 42,697 |
| Intangible assets, net | 4,608 | 4,830 |
| Equity method investments | 46,068 | 6,634 |
| Deferred tax assets | 24,802 | 32,539 |
| Other long-term assets | 14,496 | 7,993 |
| Total Assets | $ 193,811 | $ 159,664 |
| LIABILITIES AND STOCKHOLDERS' EQUITY | | |
| Current liabilities: | | |
| Accounts payable | $ 4,785 | $ 6,235 |
| Accrued payroll and related liabilities | 3,779 | 8,279 |
| Current portion of long-term debt | 24,166 | 24,067 |
| Other current liabilities | 7,095 | 2,138 |
| Total current liabilities | 39,825 | 40,719 |
| Long-term debt | 43,999 | 50,058 |
| Other long-term liabilities | 4,071 | 940 |
| Total Liabilities | 87,895 | 91,717 |
| Commitments and contingencies (Note 8) | | |
| Stockholders' equity: | | |
| Preferred stock: par value of $.001 per share, 50,000,000 shares authorized, none outstanding | — | — |
| Common stock: par value of $.001 per share, 100,000,000 shares authorized, 22,836,435 and 22,640,677 shares issued, and 18,708,371 and 18,576,489 shares outstanding at March 31, 2019 and December 31, 2018, respectively | 23 | 23 |
| Treasury stock, at cost: 4,128,064 and 4,064,188 shares as of March 31, 2019 and December 31, 2018, respectively | (42,433) | (41,740) |
| Additional paid-in capital | 96,822 | 96,750 |
| Retained earnings | 51,504 | 12,914 |
| Total stockholders' equity | 105,916 | 67,947 |
| Total Liabilities and Stockholders' Equity | $ 193,811 | $ 159,664 |

(1) See complete, unaudited Condensed Consolidated Financial Statements and Notes related thereto within the Quarterly Report on Form 10-Q for the period ended March 31, 2019.

# Appendix C: 10-Q Income Statement(1)

| *(in thousands, except per share data)* | Three Months Ended March 31, 2019 | 2018 |
|---|---|---|
| Revenues: | | |
| Consumables | $ 15,109 | $ 621 |
| License royalties, related party | 4,220 | 3,230 |
| Other | — | 48 |
| Total revenues | 19,329 | 3,899 |
| Operating expenses: | | |
| Consumables cost of revenue, exclusive of depreciation and amortization | 14,108 | 711 |
| Other sales cost of revenue, exclusive of depreciation and amortization | — | (148) |
| Payroll and benefits | 2,556 | 2,214 |
| Legal and professional fees | 1,976 | 1,548 |
| General and administrative | 2,142 | 1,170 |
| Depreciation, amortization, depletion and accretion | 2,102 | 116 |
| Total operating expenses | 22,884 | 5,611 |
| Operating loss | (3,555) | (1,712) |
| Other income (expense): | | |
| Earnings from equity method investments | 21,690 | 12,253 |
| Interest income | 70 | — |
| Interest expense | (2,104) | (336) |
| Other | — | 26 |
| Total other income | $ 19,656 | $ 11,943 |
| Income before income tax expense | 16,101 | 10,231 |
| Income tax expense | 1,699 | 2,569 |
| Net income | $ 14,402 | $ 7,662 |
| Earnings per common share (Note 1): | | |
| Basic | $ 0.79 | $ 0.37 |
| Diluted | $ 0.78 | $ 0.37 |
| Weighted-average number of common shares outstanding: | | |
| Basic | 18,268 | 20,502 |
| Diluted | 18,433 | 20,584 |

(1) See complete, unaudited Condensed Consolidated Financial Statements and Notes related thereto within the Quarterly Report on Form 10-Q for the period ended March 31, 2019.

# Appendix D: 10-Q Cash Flow[1]

| *(in thousands)* | Three Months Ended March 31, 2019 | 2018 |
|---|---|---|
| **Cash flows from operating activities** | | |
| Net income | $ 14,402 | $ 7,662 |
| Adjustments to reconcile net income to net cash provided by operating activities: | | |
| Decrease in valuation allowance on deferred tax assets | (4,020) | — |
| Depreciation, amortization, depletion and accretion | 2,102 | 116 |
| Amortization of debt discount and debt issuance costs | 381 | — |
| Stock-based compensation expense | 317 | 335 |
| Earnings from equity method investments | (21,690) | (12,253) |
| Other non-cash items, net | 75 | 163 |
| Changes in operating assets and liabilities: | | |
| Receivables | 1,782 | (223) |
| Related party receivables | 63 | 17 |
| Prepaid expenses and other assets | 80 | 185 |
| Costs incurred on uncompleted contracts | — | 15,945 |
| Inventories | 3,262 | — |
| Deferred tax assets, net | 3,343 | 1,587 |
| Other long-term assets | 773 | — |
| Accounts payable | (789) | 297 |
| Accrued payroll and related liabilities | (4,500) | (741) |
| Other current liabilities | 2,154 | 638 |
| Billings on uncompleted contracts | — | (15,945) |
| Operating lease liabilities | (804) | — |
| Other long-term liabilities | (401) | (44) |
| Distributions from equity method investees, return on investment | 19,488 | 2,400 |
| Net cash provided by operating activities | 16,018 | 139 |

(1) See complete, unaudited Condensed Consolidated Financial Statements and Notes related thereto within the Quarterly Report on Form 10-Q for the period ended March 31, 2019.

# Appendix D: 10-Q Cash Flow (continued)(1)

| *(in thousands)* | Three Months Ended March 31, 2019 | Three Months Ended March 31, 2018 |
|---|---|---|
| Cash flows from investing activities | | |
| Distributions from equity method investees in excess of cumulative earnings | $ — | $ 11,050 |
| Acquisition of business | (661) | — |
| Acquisition of property, plant, equipment, and intangible assets | (1,087) | (74) |
| Mine development costs | (324) | — |
| Net cash (used in) provided by investing activities | (2,072) | 10,976 |
| Cash flows from financing activities | | |
| Principal payments on term loan | (6,000) | — |
| Principal payments on finance lease obligations | (344) | — |
| Dividends paid | (4,571) | (5,142) |
| Repurchase of common shares | (693) | (1,642) |
| Repurchase of shares to satisfy tax withholdings | (245) | (267) |
| Net cash used in financing activities | (11,853) | (7,051) |
| Increase in Cash and Cash Equivalents and Restricted Cash | 2,093 | 4,064 |
| Cash and Cash Equivalents and Restricted Cash, beginning of period | 23,772 | 30,693 |
| Cash and Cash Equivalents and Restricted Cash, end of period | $ 25,865 | $ 34,757 |
| Supplemental disclosure of cash flow information: | | |
| Supplemental disclosure of non-cash investing and financing activities: | | |
| Dividends declared, not paid | $ 58 | $ 46 |

(1) See complete, unaudited Condensed Consolidated Financial Statements and Notes related thereto within the Quarterly Report on Form 10-Q for the period ended March 31, 2019.

# Appendix E: Non-GAAP Financial Measure & Consolidated EBITDA Reconciliation to Net Income

**Note on Non-GAAP Financial Measure**

To supplement the Company's financial information presented in accordance with U.S. generally accepted accounting principles, or GAAP, this investor presentation includes a non-GAAP measure of certain financial performance. This non-GAAP measures include Consolidated EBITDA. The Company included a non-GAAP measure because management believes that it helps to facilitate comparison of operating results between periods. The Company believes the non-GAAP measure provides useful information to both management and users of the financial statements by excluding certain expenses, gains and losses that may not be indicative of core operating results and business outlook. The non-GAAP measure is not in accordance with, or an alternative to, measures prepared in accordance with GAAP and may be different from non-GAAP measures used by other companies. In addition, the non-GAAP measure is not based on any comprehensive set of accounting rules or principles. This measure should only be used to evaluate the Company's results of operations in conjunction with the corresponding GAAP measures.

The Company has defined Consolidated EBITDA, as net income, adjusted for the impact of the following items that are either non-cash or that the Company does not consider representative of its ongoing operating performance: depreciation, amortization, depletion and accretion, interest expense, net and income tax expense. Because Consolidated EBITDA omits certain non-cash items, the Company believes that the measure is less susceptible to variances that affect the Company's operating performance.

The Company presents Consolidated EBITDA because the Company believes it is useful as supplemental measures in evaluating the performance of the Company's operating performance and provides greater transparency into the results of operations. The Company's management uses Consolidated EBITDA as a factor in evaluating the performance of its business.

The adjustments to Consolidated EBITDA in future periods are generally expected to be similar. Consolidated EBITDA has limitations as analytical tools, and you should not consider these measures in isolation or as a substitute for analyzing the Company's results as reported under GAAP.

| | **Three Months Ended March 31,** | |
|---|---|---|
| *(in thousands)* | **2019** | **2018** |
| Net income | $ 14,402 | $ 7,662 |
| Depreciation, amortization, depletion and accretion | 2,102 | 116 |
| Interest expense, net | 2,034 | 336 |
| Income tax expense | 1,699 | 2,569 |
| Consolidated EBITDA | $ 20,237 | $ 10,683 |