

# Advanced Emissions Solutions



Advanced Emissions Solutions, Inc.  
Advancing **Cleaner** Energy

# Company Overview

Current Price	\$13.97	Market Cap	\$259M
52 Week Range	\$9.01 – \$15.34	Enterprise Value	\$290M
Dividend Yield	7.4%	Forward P/E	7.62



Source: Yahoo Finance

Overview

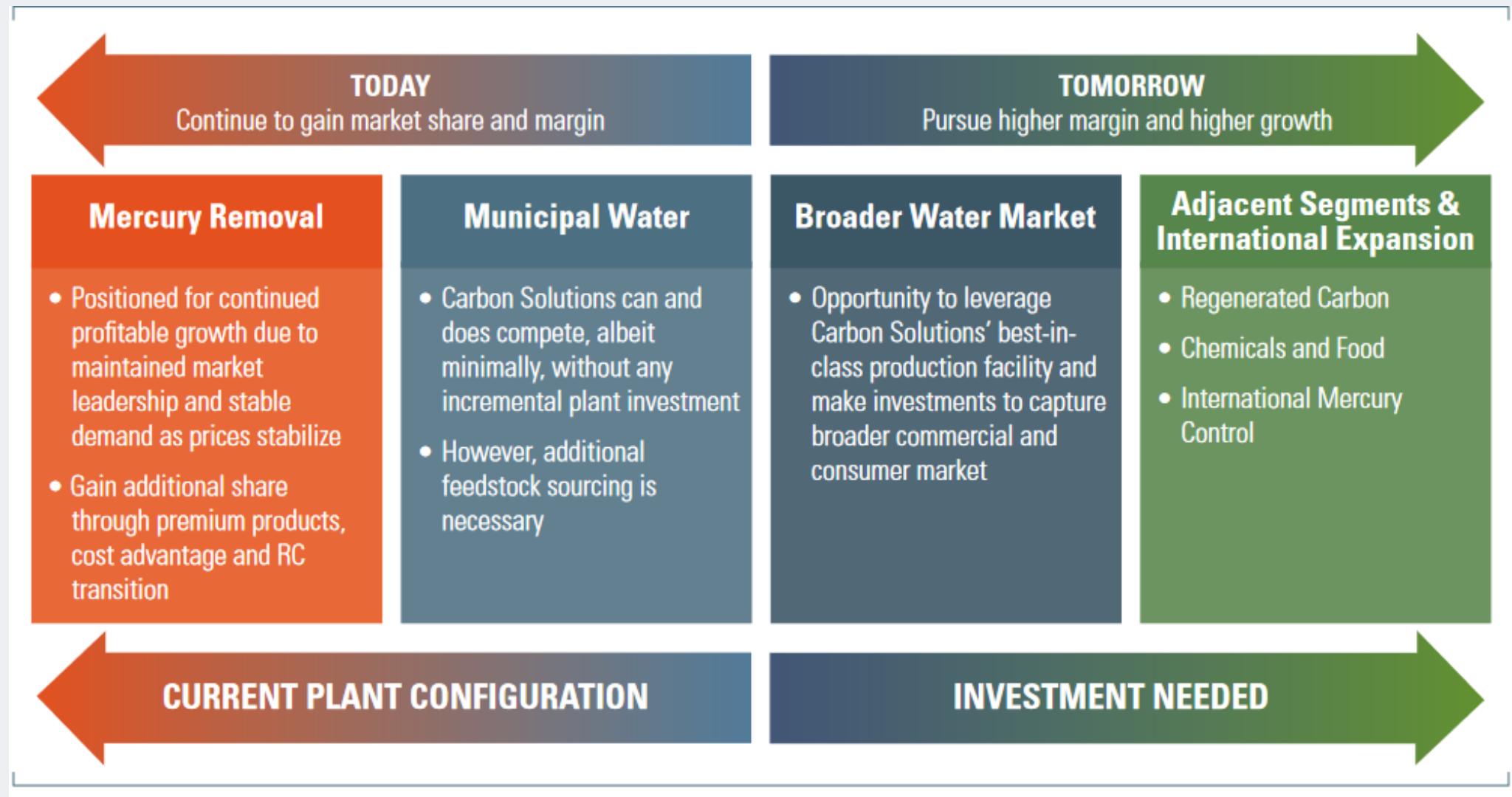
CA's

Strategy

Drivers

Risk

# Company Overview and Current Strategy



# Industry Drivers

## 1. Growth of Global activated Carbon Market

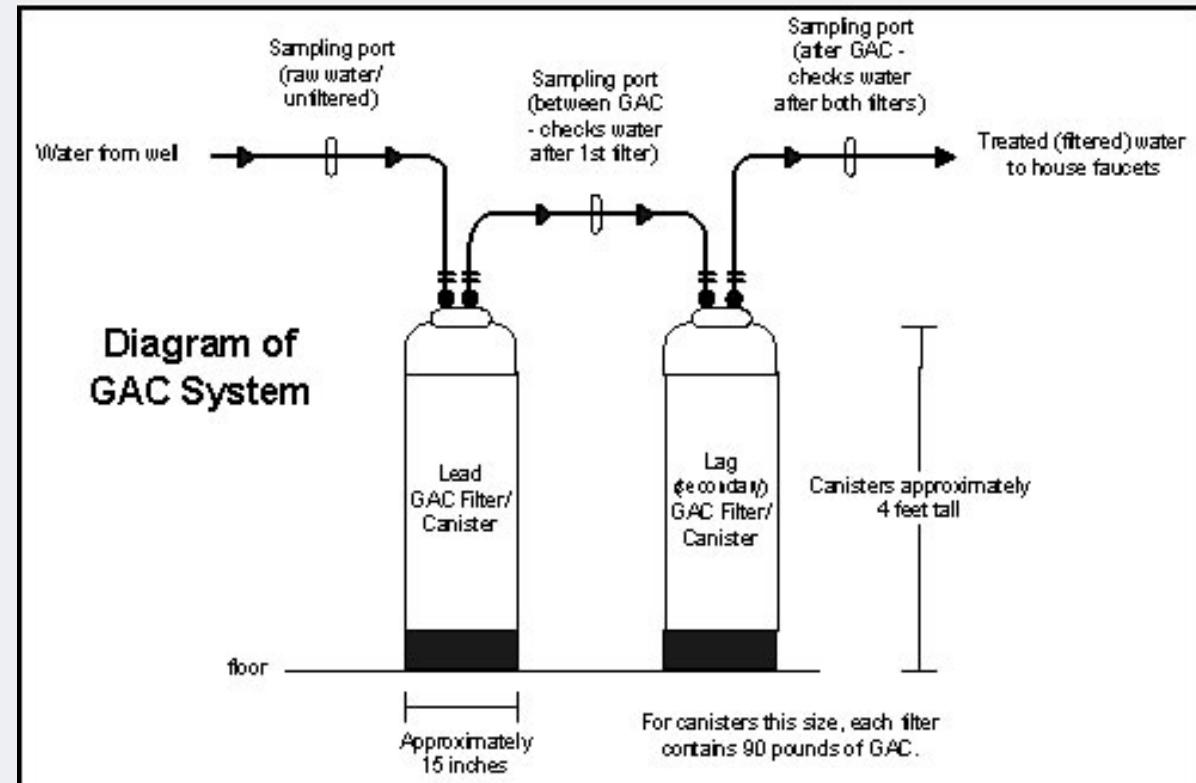
- Activated carbon is different from coal, activated carbon is processed to increase surface area and minimize impurities
- 750 million pounds a year and high growth in US

## 2. More Strict emissions compliance regulations globally

- Higher Growth expected with more stricter emissions control
- Paris agreement

## 3. Increased Demand for Water Purification

- Emphasis on using recycled water in many high water stress countries



# Business Drivers

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## 1. Strategic Acquisitions

- They have reacquired Carbon Solutions which will propel their growth, as they are now the market leader in the North American Mercury control market

## 2. Diversifying into other segments

- Expansion into the water and other segments

## 3. Large Volume of Development

- A total of 23 RC Facilities are leased out, with 2 leased out in the past 3 months, this trend is expected to continue





## REFINED COAL FACILITIES TODAY AND TOMORROW

### FULL-TIME OPERATIONS ROADMAP



RC Facility information as of June 30, 2019

2019-2021

(1) Certain facilities would require capital investment to transition to operating status

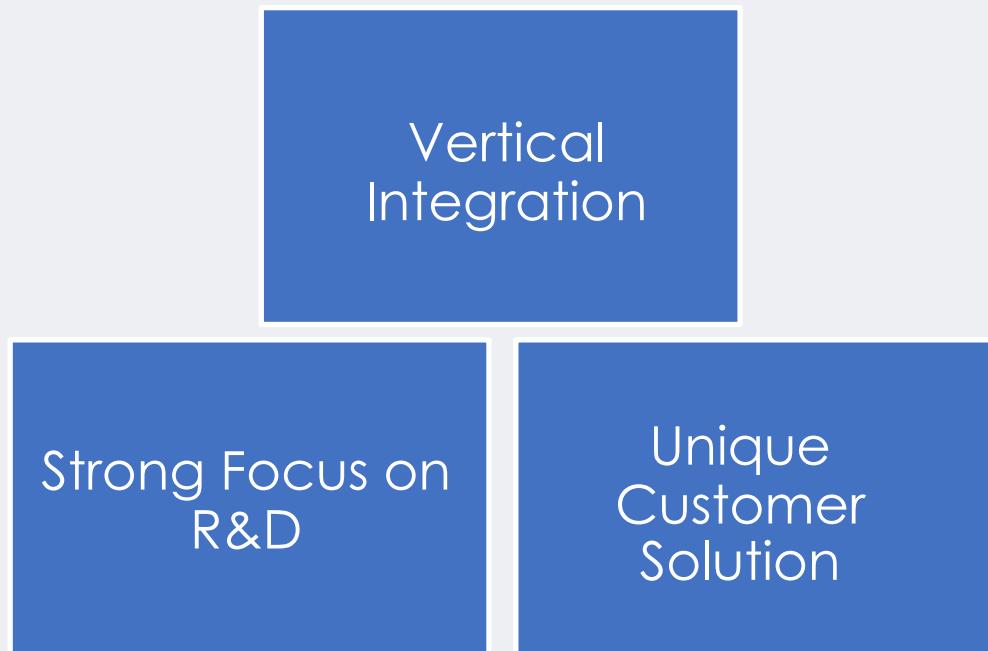
(2) Two facilities were in the engineering and construction phase

(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 2019

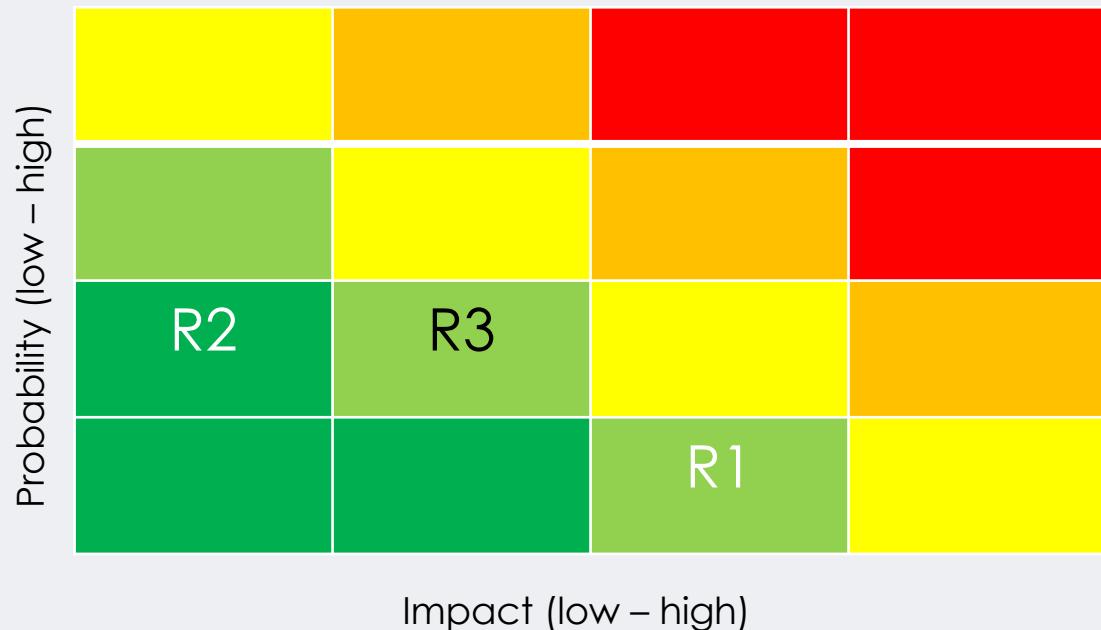
(4) One facility that is operating was placed in service in 2009 and available Section 45 tax credit generation ability for this facility will expire during the year 2019

# Competitive Advantages

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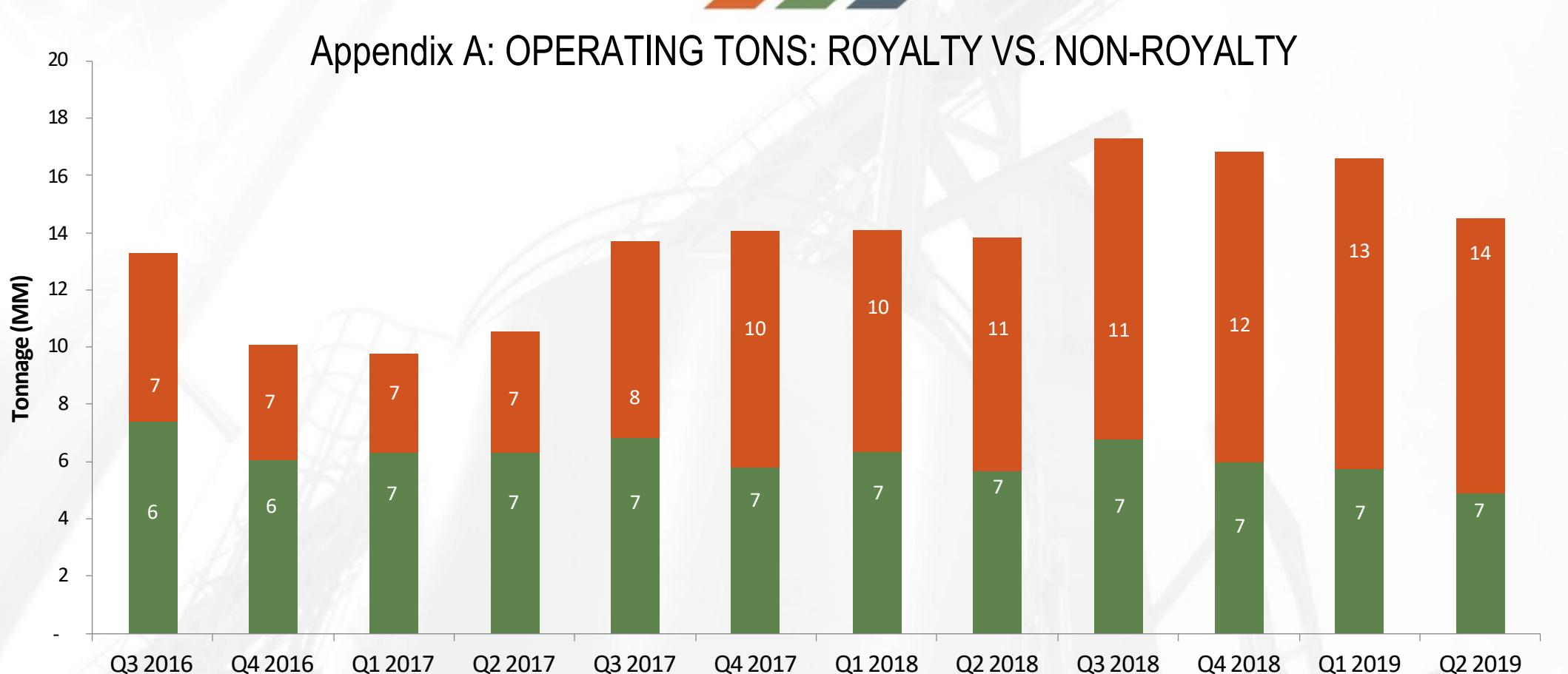
# Key Risks, Mitigation



KEY	RISK
R1	<p><b>Drastic shift in Government Policy</b></p> <ul style="list-style-type: none"> <li>➤ With regards to coal power plants</li> <li>➤ Their current strategy focuses on expanding into the water market and other segments</li> </ul>
R2	<p><b>Risk of loss of s45 tax credits</b></p> <ul style="list-style-type: none"> <li>➤ This is a major reason customers buy our products, and loss of tax credits will have a material impact</li> <li>➤ We are moving away from RC towards other segments</li> </ul>
R3	<p><b>Unable to integrate Carbon Solutions</b></p> <ul style="list-style-type: none"> <li>➤ Integration will enable cutting operating costs and maximising revenue</li> </ul>



# APPENDIX



Three Month Ended  
June 30, 2019

#### Operating Tons

QTD - Total

Royalty	Non-Royalty	YTD - Total
9,592	4,905	14,497
Count (#) <sup>(2)</sup>	14	21

Six Months Ended  
June 30, 2019

#### Operating Tons

YTD - Total

Royalty	Non-Royalty	YTD - Total
20,454	10,636	31,090
Count (#) <sup>(2)</sup>	7	21

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 June 30, 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<sup>(1)</sup>

(in thousands, except share data)

	As of	
	June 30, 2019	December 31, 2018
<b>ASSETS</b>		
Current assets:		
Cash, cash equivalents and restricted cash	\$ 15,420	\$ 18,577
Receivables, net	5,606	9,554
Receivables, related parties	4,189	4,284
Inventories, net	17,798	21,791
Prepaid expenses and other assets	5,598	5,570
Total current assets	<u>48,611</u>	<u>59,776</u>
Restricted cash, long-term	5,000	5,195
Property, plant and equipment, net of accumulated depreciation of \$4,179 and \$1,499, respectively	44,825	42,697
Intangible assets, net	4,501	4,830
Equity method investments	48,403	6,634
Deferred tax assets, net	19,179	32,539
Other long-term assets, net	16,553	7,993
Total Assets	<u>\$ 187,072</u>	<u>\$ 159,664</u>
<b>LIABILITIES AND STOCKHOLDERS' EQUITY</b>		
Current liabilities:		
Accounts payable	\$ 6,631	\$ 6,235
Accrued payroll and related liabilities	3,450	8,279
Current portion of long-term debt	24,025	24,067
Other current liabilities	5,552	2,138
Total current liabilities	<u>39,658</u>	<u>40,719</u>
Long-term debt	34,204	50,058
Other long-term liabilities	5,449	940
Total Liabilities	<u>79,311</u>	<u>91,717</u>
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, 22,867,405 and 22,640,677 shares issued, and 18,554,626 and 18,576,489 shares outstanding at June 30, 2019 and December 31, 2018, respectively	23	23
Treasury stock, at cost: 4,312,779 and 4,064,188 shares as of June 30, 2019 and December 31, 2018, respectively	(44,571)	(41,740)
Additional paid-in capital	97,354	96,750
Retained earnings	54,955	12,914
Total stockholders' equity	<u>107,761</u>	<u>67,947</u>
Total Liabilities and Stockholders' Equity	<u>\$ 187,072</u>	<u>\$ 159,664</u>

(1) See complete, unaudited Condensed Consolidated Financial Statements and Notes related thereto within the Quarterly Report on Form 10-Q for the period ended June 30, 2019.

## Appendix C: 10-Q Income Statement<sup>(1)</sup>

<i>(in thousands, except per share data)</i>	Three Months Ended June 30,		Six Months Ended June 30,	
	2019	2018	2019	2018
Revenues:				
Consumables	\$ 11,386	\$ 726	\$ 26,495	\$ 1,347
License royalties, related party	4,191	3,523	8,411	6,753
Other	—	24	—	72
Total revenues	15,577	4,273	34,906	8,172
Operating expenses:				
Consumables cost of revenue, exclusive of depreciation and amortization	12,286	902	26,394	1,613
Other sales cost of revenue, exclusive of depreciation and amortization	6	(198)	6	(346)
Payroll and benefits	2,798	2,759	5,354	4,973
Legal and professional fees	1,569	1,213	3,545	2,761
General and administrative	2,421	1,094	4,563	2,264
Depreciation, amortization, depletion and accretion	757	72	2,859	188
Total operating expenses	19,837	5,842	42,721	11,453
Operating loss	(4,260)	(1,569)	(7,815)	(3,281)
Other income (expense):				
Earnings from equity method investments	20,935	15,889	42,625	28,142
Interest expense	(1,987)	(412)	(4,091)	(748)
Other	60	34	130	60
Total other income	\$ 19,008	\$ 15,511	\$ 38,664	\$ 27,454
Income before income tax expense	14,748	13,942	30,849	24,173
Income tax expense (benefit)	6,634	(1,349)	8,333	1,220
Net income	\$ 8,114	\$ 15,291	\$ 22,516	\$ 22,953
Earnings per common share (Note 1):				
Basic	\$ 0.45	\$ 0.76	\$ 1.23	\$ 1.13
Diluted	\$ 0.44	\$ 0.75	\$ 1.22	\$ 1.12
Weighted-average number of common shares outstanding:				
Basic	18,172	20,062	18,219	20,275
Diluted	18,377	20,195	18,412	20,386

(1) See complete, unaudited Condensed Consolidated Financial Statements and Notes related thereto within the Quarterly Report on Form 10-Q for the period ended June 30, 2019.

## Appendix D: 10-Q Cash Flow<sup>(1)</sup>

(in thousands)	Six Months Ended June 30,	
	2019	2018
<b>Cash flows from operating activities</b>		
Net income	\$ 22,516	\$ 22,953
Adjustments to reconcile net income to net cash provided by operating activities:		
Increase (decrease) in valuation allowance on deferred tax assets	849	(498)
Depreciation, amortization, depletion and accretion	2,859	188
Amortization of debt discount and debt issuance costs	851	—
Stock-based compensation expense	858	1,010
Earnings from equity method investments	(42,625)	(28,142)
Other non-cash items, net	474	192
Changes in operating assets and liabilities:		
Receivables and related party receivables	4,044	(64)
Prepaid expenses and other assets	47	(375)
Costs incurred on uncompleted contracts	—	15,945
Inventories	3,794	—
Deferred tax assets, net	4,097	(246)
Other long-term assets	1,470	—
Accounts payable	(758)	323
Accrued payroll and related liabilities	(4,829)	152
Other current liabilities	862	(1,505)
Billings on uncompleted contracts	—	(15,945)
Operating lease liabilities	(1,563)	—
Other long-term liabilities	(462)	(135)
Distributions from equity method investees, return on investment	38,088	2,700
Net cash provided by (used in) operating activities	30,572	(3,447)

(1) See complete, unaudited Condensed Consolidated Financial Statements and Notes related thereto within the Quarterly Report on Form 10-Q for the period ended June 30, 2019.

## Appendix D: 10-Q Cash Flow (continued)<sup>(1)</sup>

<i>(in thousands)</i>	Six Months Ended June 30,	
	2019	2018
Cash flows from investing activities		
Distributions from equity method investees in excess of cumulative earnings	\$ —	\$ 25,500
Acquisition of business	(661)	—
Acquisition of property, plant, equipment, and intangible assets	(3,797)	(131)
Mine development costs	(521)	—
Contributions to equity method investees	—	(750)
Net cash (used in) provided by investing activities	(4,979)	24,619
Cash flows from financing activities		
Principal payments on term loan	(16,000)	—
Principal payments on finance lease obligations	(681)	—
Dividends paid	(9,179)	(10,216)
Repurchase of common shares	(2,831)	(9,111)
Repurchase of common shares to satisfy tax withholdings	(254)	(359)
Net cash used in financing activities	(28,945)	(19,686)
(Decrease) increase in Cash and Cash Equivalents and Restricted Cash	(3,352)	1,486
Cash and Cash Equivalents and Restricted Cash, beginning of period	23,772	30,693
Cash and Cash Equivalents and Restricted Cash, end of period	\$ 20,420	\$ 32,179
Supplemental disclosure of non-cash investing and financing activities:		
Acquisition of property, plant and equipment through accounts payable	\$ 1,561	\$ —
Dividends declared, not paid	\$ 113	\$ 63

<sup>(1)</sup> See complete, unaudited Condensed Consolidated Financial Statements and Notes related thereto within the Quarterly Report on Form 10-Q for the period ended June 30, 2019.