



Advanced Emissions Solutions, Inc.
Advancing Cleaner Energy

First Quarter 2017 Results Call

May 9, 2017





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 growth, amount and timing of production and sale of Refined Coal ("RC"); Tinnuum Group, LLC and Tinnuum Services, LLC cash flow and their ability to make distributions, and Tinnuum Group's ability to lease or sell remaining RC facilities; future revenues, expenses, cash flow, liquidity, and other financial and accounting measures; potential future value of our stock; our ability to commercialize EC products and intellectual property; expectations about the timing and amount of future dividend payments; completion of our announced tender offer; returning value to stockholders; and related matters. 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; loss of key personnel; the value of our products, technologies and intellectual property to customers and strategic investors; the value placed on our stock price as a result of anticipated future cash flows; intellectual property infringement claims from third parties; seasonality 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 AND RECENT HIGHLIGHTS

- Tinuum distributions to ADES were \$14.7 million during the first quarter of 2017, an increase of \$9.8 million from the comparable quarter in 2016
- Completed the lease of a RC facility in late March bringing the number of invested facilities to 14 as of the end of the first quarter
- Continued validation and expansion of chemicals business, resulting in 426% revenue growth quarter-over-quarter
- Reduced indirect operating costs by 38% compared to first quarter of 2016
- Cash position increased by \$15.2 million compared to previous quarter, ending with \$28.4 million of cash and cash equivalents as of March 31, 2017
- Net income of \$8.7 million, up 99% quarter-over-quarter
- Future projected cash flows from Tinuum updated to between \$275 million and \$300 million through the end of 2021
- Announced tender offer of up to \$10 million
- Expected June announcement of \$0.25 per share recurring quarterly dividend



REFINED COAL ENVIRONMENT

The reduced refined coal business is proven and yields many benefits to the Utilities, Investors and the environment, however there are hurdles to overcome

HURDLES

Coal Reputation and
Political Stigma

Uncertain Federal Tax Reform

Accounting Treatment

Transaction Complexity

Investor Business Priorities

BENEFITS

Net Income and EPS Improvement

Uniquely Strong
Cash Returns

Rapid Return Of Capital

Provide Cleaner Energy

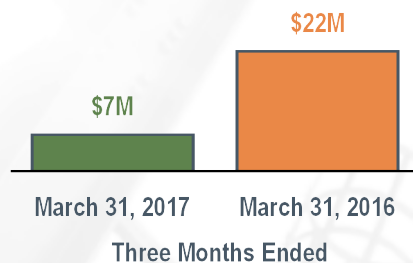


FINANCIALS

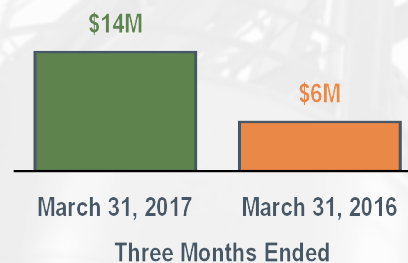


FINANCIAL HIGHLIGHTS

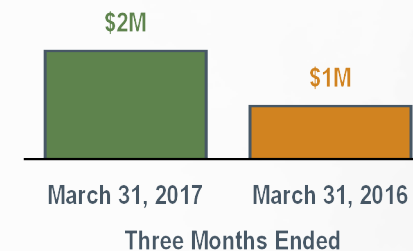
REVENUES



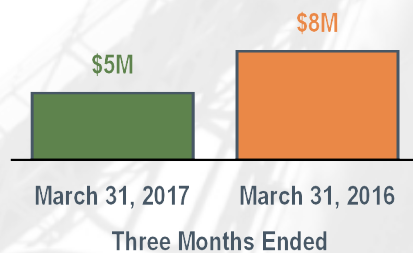
EQUITY METHOD EARNINGS



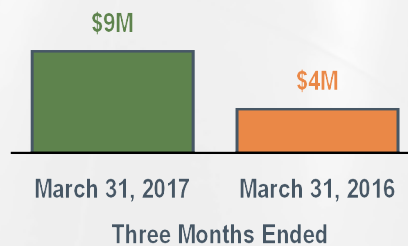
ROYALTIES



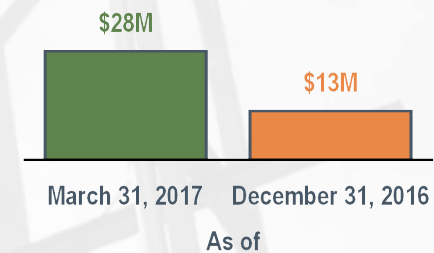
OTHER OPERATING EXPENSES



NET INCOME



CASH & CASH EQUIVALENTS





COMPONENTS OF EARNINGS

(In thousands)	Three Months Ended March 31,	
	2017	2016
RC segment operating income	\$ 15,025	\$ 7,870
EC segment operating income	273	4,631
Segment operating income	15,298	12,501
Adjustments to reconcile to net income		
Corporate payroll and benefits	(1,810)	(3,134)
Corporate rent and occupancy	(26)	(211)
Corporate legal and professional fees	(998)	(2,928)
Corporate general and administrative	(859)	(775)
Corporate depreciation and amortization	(207)	(116)
Corporate interest (expense) income, net	(224)	(910)
Other income (expense), net	2,900	2
Income tax expense	(5,386)	(53)
Net income	\$ 8,688	\$ 4,376

TINUUM GROUP & ADES: CASH FLOW UPDATE

Cash Flow Update (In thousands)	Three Months Ended March 31,	
	2017	2016
Tinum Group		
Cash and cash equivalents, beginning of year	\$ 10,897	\$ 6,183
Cash provided by (used in):		
Operating activities	16,753	10,140
Investing activities	(1,796)	(2,029)
Financing activities	(15,140)	(4,405)
Net change in cash and cash equivalents	(183)	3,706
Cash and cash equivalents, end of period	\$ 10,714	\$ 9,889
Distributions to ADES	\$ 13,175	\$ 3,400
ADES		
Cash and cash equivalents and restricted cash, beginning of year	\$ 26,944	\$ 20,973
Cash provided by (used in):		
Operating activities	(2,820)	(1,858)
Investing activities	13,033	1,786
Financing activities	(179)	(3,659)
Net change in cash and cash equivalents and restricted cash	10,034	(3,731)
Cash and cash equivalents and restricted cash, end of period	\$ 36,978	\$ 17,242

Note: ADES owns 42.5% of Tinuum Group and accounts for its investment under the equity method of accounting



REFINED COAL



REFINED COAL FACILITIES TODAY AND TOMORROW

FULL-TIME OPERATIONS ROADMAP

Operating and Invested

14 RC facilities
leased/sold
(40-50 MT/year)

Not Operating and Not Invested

8 RC facilities – installed
and waiting for investor

6 RC facilities – yet
to be installed

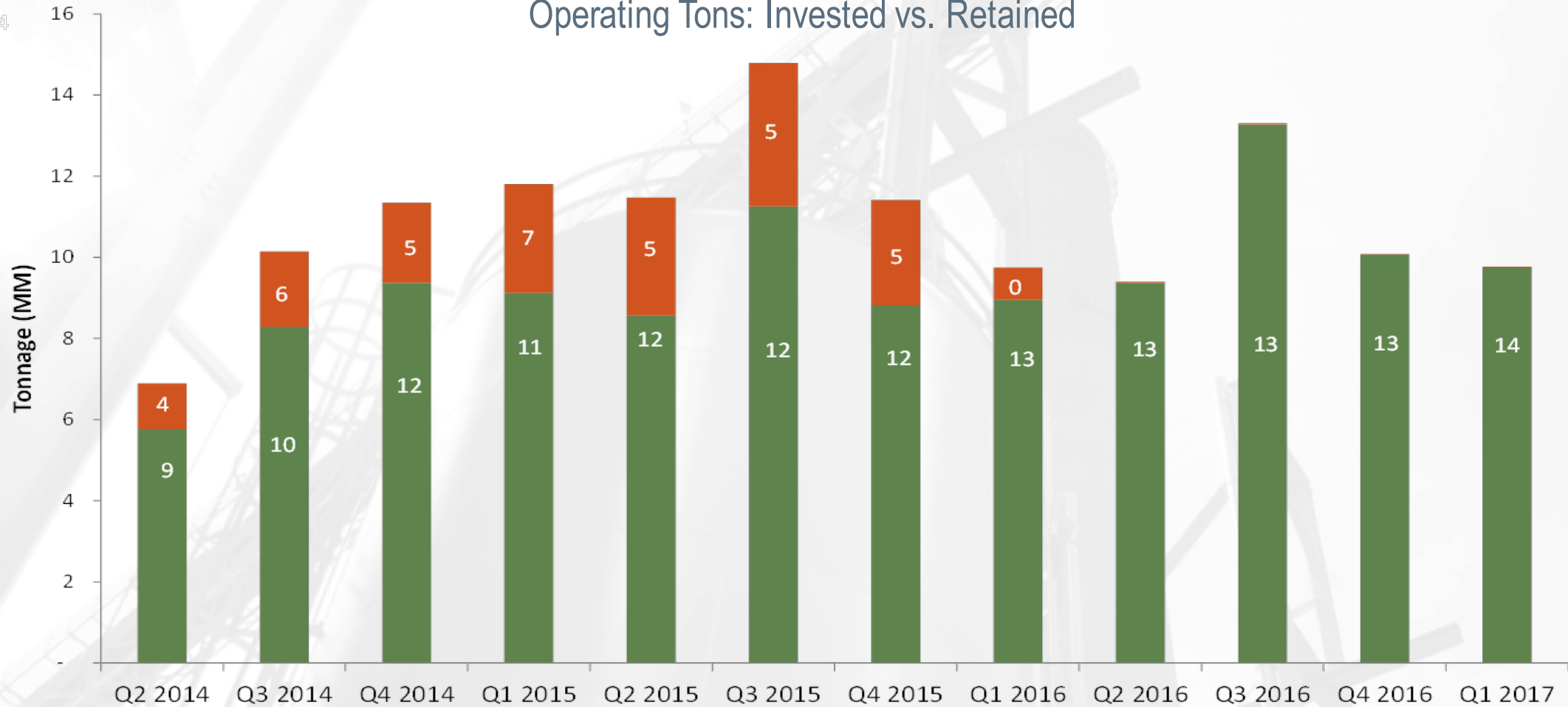
POTENTIAL

28 RC facilities
(~100 MT/year)

RC Facility information as of March 31, 2017

2017 - 2021

Operating Tons: Invested vs. Retained

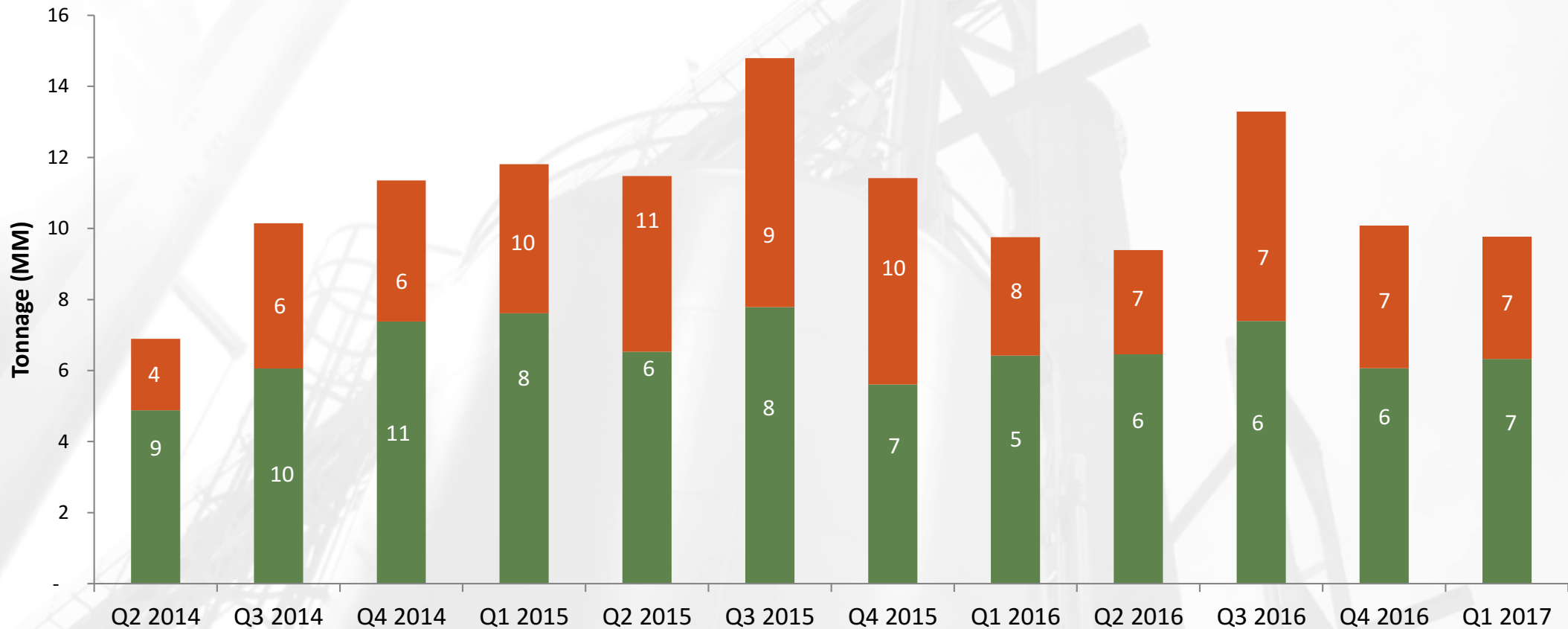


Three Month Ended March 31, 2017	Invested	Retained	QTD - Total
Tonnage ⁽¹⁾	9,746	21	9,768
Count (#)	14	-	14

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, 2017 (in thousands)

Operating Tons: Royalty vs. Non-Royalty



Three Month Ended March 31, 2017	Operating Tons		QTD - Total
	Royalty	Non-Royalty	
Tonnage ⁽¹⁾	3,441	6,327	9,768
Count (#) ⁽²⁾	7	7	14

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 month ended March 31, 2017 (in thousands)

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



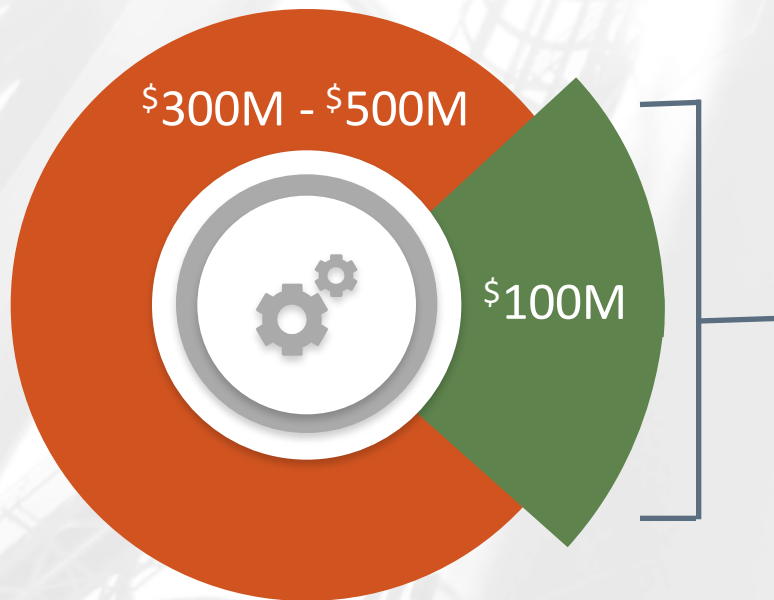
EMISSIONS CONTROL



EMISSIONS CONTROL: CURRENT OPPORTUNITY

CURRENT FOCUS - MERCURY CONTROL

- Mercury control regulation since 2015/2016; with large capital investments complete
- Recurring consumables needed to control mercury



MARKET

Consumable market is \$400M - \$600M annually ⁽¹⁾

\$100M annual target market ⁽¹⁾

COMPETITIVE DIFFERENTIATORS

- Cost effective and simple alternative
- Less equipment corrosion
- Turn-key with world-renowned experts

COMPETITIVE ADVANTAGES

- Patented technology
- Low operating cost model
- Recurring revenue model

⁽¹⁾ Total consumables market and target market estimated annual revenues based on the Company's internal estimates from current products for the mercury control consumables market

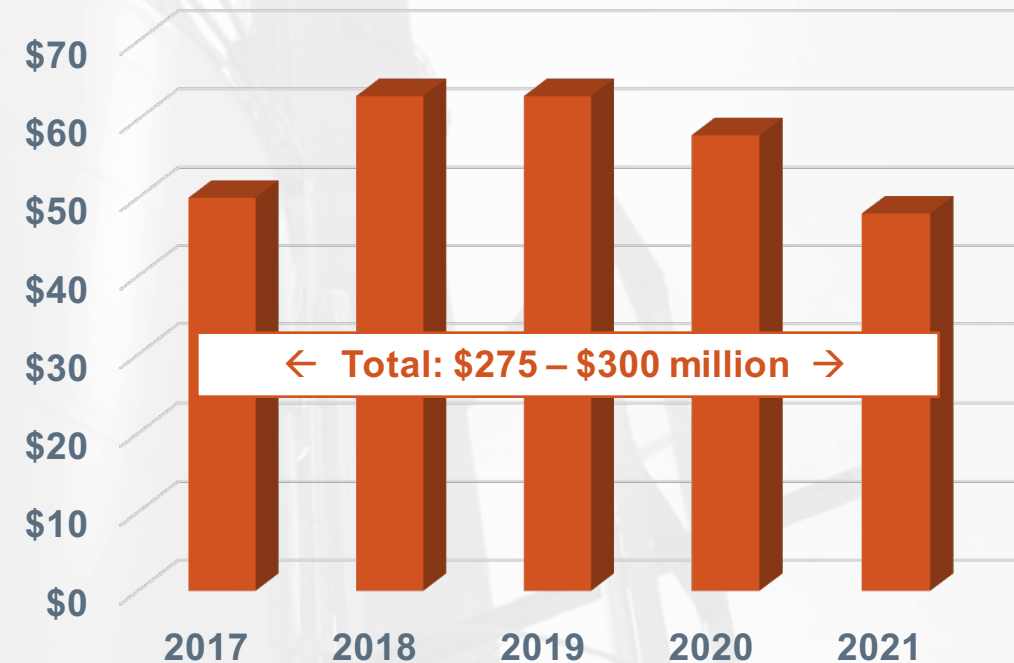


Future Cash Flows for ADES & 2017 Priorities

Projected Future ADES Cash Flows

PROJECTED CASH FLOWS (in millions)

- Based on 14 invested facilities as of March 31, 2017
- Results in projected cash flows of \$275M to \$300M to ADES in total through 2021 ⁽¹⁾
- Each additional refined coal facility could add between \$5 -7 million annually
- Closed an additional RC facility in March 2017



(1) The projections is based on the following four key assumptions: 1) Tinuum Group continues to not operate retained facilities; 2) Tinuum Group does not have material CapEx or unusual operating expenses; 3) tax equity lease renewals are not terminated or repriced; 4) coal-fired generation remains consistent



CAPITAL ALLOCATION



Stock buy-back announced
to repurchase up to \$10
million in common stock



Expected \$0.25 per
share recurring quarterly
dividend starting in June

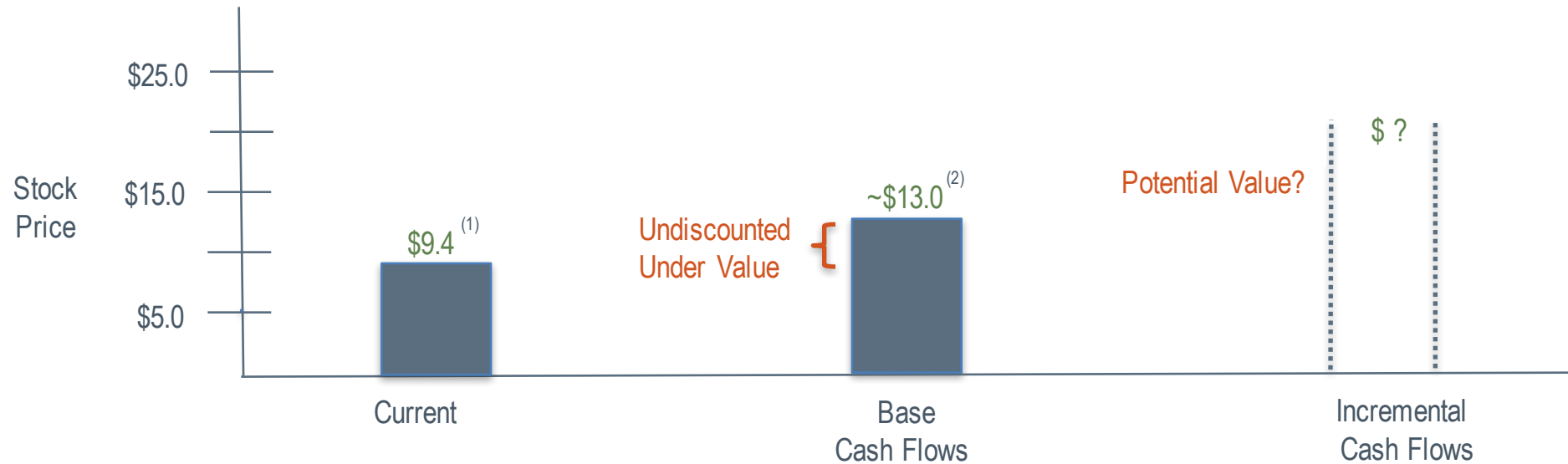


Tax Asset Protection Plan
designed to protect the
Company's ability to utilize its
net operating losses and tax
credits



Evaluate accretive
M&A alternatives
within dynamic market

CURRENT CASH FLOWS VS. STOCK PRICE



Undiscounted Under Value:

Current stock price may be undervalued based on current ADES cash flows of \$275M to \$300M through 2021

Potential Value:

Ability to add up to 14 more Refined Coal facilities; each new refined coal facility would add between \$5M-\$7M annually; 1 new facility added in 2017 would add approximately \$30M of cash or \$1 to \$2 per share

Ability to generate cash from expansion of consumables market share and untapped IP within Emissions Control business

⁽¹⁾ Stock price based on proximity to 5/5/17 closing price

⁽²⁾ Stock price calculated based on cash flow from current business of \$275M to \$300M divided by outstanding shares.



2017 PRIORITIES



OBTAIN NEW TAX EQUITY INVESTORS FOR REFINED COAL:

Nurture current & add additional sales channels

Dedicate additional resources

Leverage improving political and refined coal tax equity market



GROW EMISSIONS CONTROL & CONTINUE TRANSFORMATION:

Sell recently commercialized chemicals

Further monetize valuable intellectual property

Explore targeted M&A



RETURN CAPITAL TO STOCKHOLDERS:

Evaluate potential stock buy-backs

Declare dividend of \$0.25 in Q2

Evaluate potential for additional dividends (one-time and/or incremental recurring)



APPENDIX

Appendix A: 10-Q Balance Sheet⁽¹⁾

(in thousands, except share data)	As of	
	March 31, 2017	December 31, 2016
ASSETS		
Current assets:		
Cash and cash equivalents	\$ 28,442	\$ 13,208
Restricted cash	8,536	13,736
Receivables, net	1,954	8,648
Receivables, related parties, net	1,755	1,934
Costs in excess of billings on uncompleted contracts	—	25
Prepaid expenses and other assets	1,736	1,357
Total current assets	42,423	38,908
Property and equipment, net of accumulated depreciation of \$1,476 and \$2,920, respectively	504	735
Cost method investment	1,016	1,016
Equity method investments	3,097	3,959
Deferred tax assets	56,010	61,396
Other long-term assets	1,725	1,282
Total Assets	\$ 104,775	\$ 107,296
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Accounts payable	\$ 1,202	\$ 1,920
Accrued payroll and related liabilities	984	2,121
Billings in excess of costs on uncompleted contracts	4,200	4,947
Legal settlements and accruals	4,591	10,706
Other current liabilities	3,965	4,017
Total current liabilities	14,942	23,711
Legal settlements and accruals, long-term	2,371	5,382
Other long-term liabilities	2,181	2,038
Total Liabilities	19,494	31,131
Commitments and contingencies (Note 6)		
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, 22,478,711 and 22,322,022 shares issued, and 22,072,056 and 22,024,675 shares outstanding at March 31, 2017 and December 31, 2016, respectively	22	22
Additional paid-in capital	119,922	119,494
Accumulated deficit	(34,663)	(43,351)
Total stockholders' equity	85,281	76,165
Total Liabilities and Stockholders' Equity	\$ 104,775	\$ 107,296

(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, 2017.

Appendix B: 10-Q Income Statement⁽¹⁾

(in thousands, except per share data and percentages)

	Three Months Ended March 31,	
	2017	2016
Revenues:		
Equipment sales	\$ 5,108	\$ 21,727
Chemicals	2,281	434
Consulting services and other	—	196
Total revenues	7,389	22,357
Operating expenses:		
Equipment sales cost of revenue, exclusive of depreciation and amortization	4,143	17,034
Chemicals cost of revenue, exclusive of depreciation and amortization	1,758	142
Consulting services cost of revenue, exclusive of depreciation and amortization	—	135
Payroll and benefits	2,182	3,802
Rent and occupancy	45	394
Legal and professional fees	1,035	2,983
General and administrative	1,263	745
Research and development, net	192	202
Depreciation and amortization	482	231
Total operating expenses	11,100	25,668
Operating loss	(3,711)	(3,311)
Other income (expense):		
Earnings from equity method investments	13,814	5,577
Royalties, related party	1,755	1,189
Interest expense	(693)	(1,964)
Revision in estimated royalty indemnity liability	2,900	—
Other income	9	2,938
Total other income	17,785	7,740
Income before income tax expense	14,074	4,429
Income tax expense	5,386	53
Net income	\$ 8,688	\$ 4,376
Earnings per common share (Note 1):		
Basic	\$ 0.39	\$ 0.20
Diluted	\$ 0.39	\$ 0.20
Weighted-average number of common shares outstanding:		
Basic	22,056	21,849
Diluted	22,243	22,176

(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, 2017.

Appendix C: 10-Q Cash Flow⁽¹⁾

(in thousands)	Three Months Ended March 31,	
	2017	2016
Cash flows from operating activities		
Net income	\$ 8,688	\$ 4,376
Adjustments to reconcile net income to net cash used in operating activities:		
Depreciation and amortization	482	231
Stock-based compensation expense	607	636
Earnings from equity method investments	(13,814)	(5,577)
Gain on sale of equity method investment	—	(2,078)
Gain on settlement of note payable	—	(869)
Other non-cash items, net	455	550
Changes in operating assets and liabilities:		
Receivables	6,695	1,012
Related party receivables	179	1,124
Prepaid expenses and other assets	(415)	496
Costs incurred on uncompleted contracts	3,883	14,613
Deferred tax asset, net	5,386	—
Other long-term assets	(805)	(1,104)
Accounts payable	(717)	(250)
Accrued payroll and related liabilities	(1,137)	(444)
Other current liabilities	(219)	(1,071)
Billings on uncompleted contracts	(4,605)	(17,021)
Advance deposit, related party	—	(396)
Other long-term liabilities	143	242
Legal settlements and accruals	(9,126)	(1,228)
Distributions from equity method investees, return on investment	1,500	4,900
Net cash used in operating activities	(2,820)	(1,858)

(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, 2017.

Appendix C: 10-Q Cash Flow (continued)⁽¹⁾

(in thousands)	Three Months Ended March 31,	
	2017	2016
Cash flows from investing activities		
Distributions from equity method investees in excess of cumulative earnings	13,175	—
Maturity of investment securities, restricted	—	336
Acquisition of property and equipment, net	(142)	(100)
Contributions to equity method investees	—	(223)
Proceeds from sale of equity method investment	—	1,773
Net cash provided by investing activities	13,033	1,786
Cash flows from financing activities		
Borrowings on Line of Credit	808	—
Repayments on Line of Credit	(808)	—
Repayments on short-term borrowings and notes payable, related party	—	(2,996)
Short-term borrowing loan costs	—	(579)
Repurchase of shares to satisfy tax withholdings	(179)	(84)
Net cash used in financing activities	(179)	(3,659)
Increase (decrease) in Cash and Cash Equivalents and Restricted Cash	10,034	(3,731)
Cash and Cash Equivalents and Restricted Cash, beginning of period	26,944	20,973
Cash and Cash Equivalents and Restricted Cash, end of period	\$ 36,978	\$ 17,242
Supplemental disclosure of cash flow information:		
Cash paid for interest	\$ 191	\$ 1,029
Cash paid (refunded) for income taxes	\$ 100	\$ (89)
Supplemental disclosure of non-cash investing and financing activities:		
Settlement of RCM6 note payable	\$ —	\$ 13,234
Non-cash reduction of equity method investment	\$ —	\$ 11,156

(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, 2017.