



Advanced Emissions Solutions, Inc.
Advancing Cleaner Energy

Second Quarter 2017 Results Call

August 8, 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"); potential to add more RC facilities; Tinum Group's ability to lease or sell remaining RC facilities; future cash flow and other financial and accounting measures; potential future value of our stock; expectations about the timing and amount of future dividend payments; 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.



SECOND QUARTER AND RECENT HIGHLIGHTS

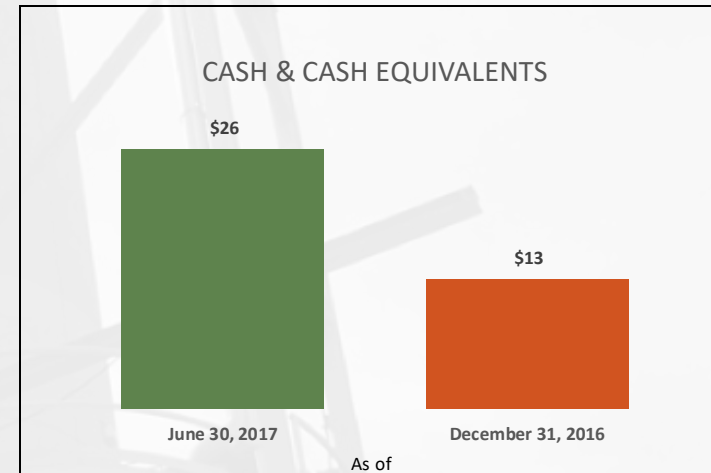
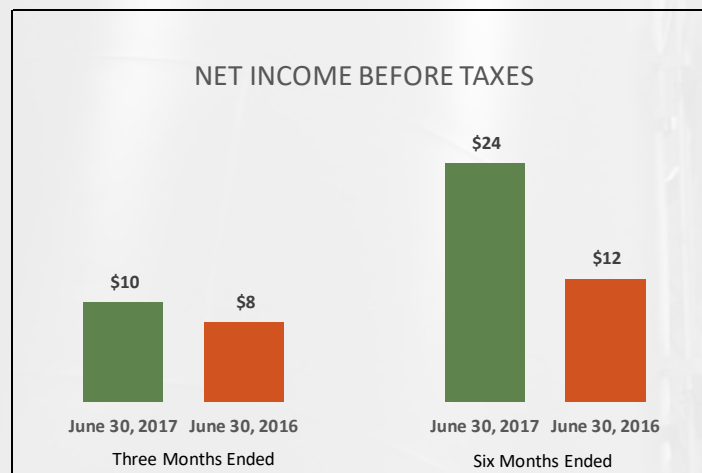
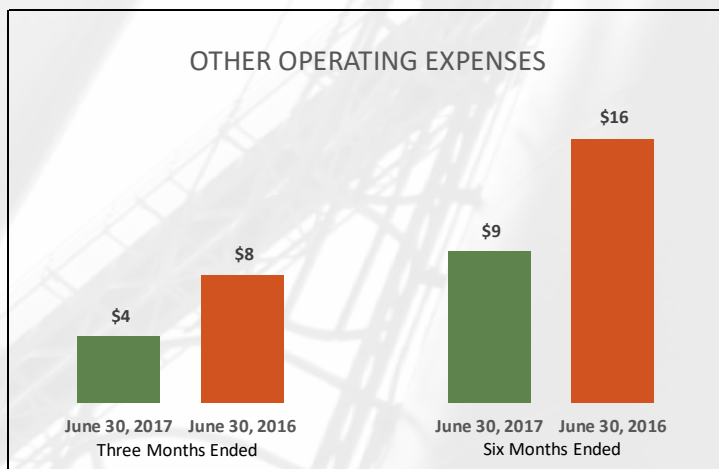
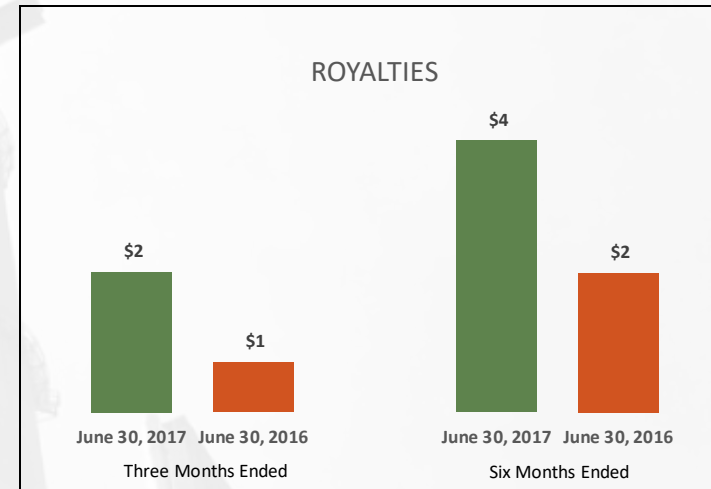
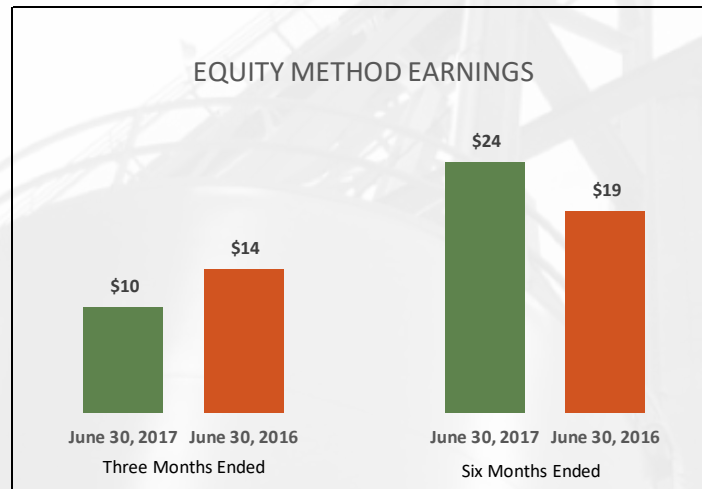
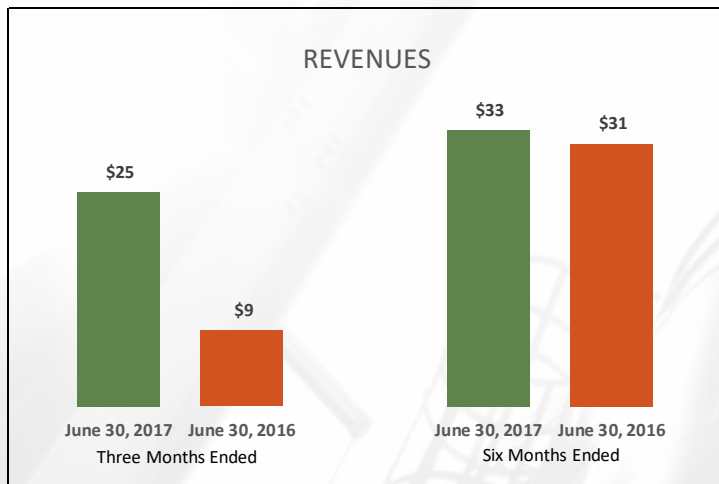
- Total stockholder return of \$18.2 million in recent months between tender offer and dividend combined
- Continued quarterly dividend; declared third quarter dividend of \$0.25 per share, payable in September
- Tinum distributions to ADES were in line with expectations and totaled \$10.5 million during the second quarter of 2017; Tinum distributions were \$25.2 million year to date, compared to \$20.8 million during the same period in 2016
- Continued investment and testing of proprietary patents within chemicals business, resulting in 38% revenue growth yearover-year
- Reduced indirect operating costs by 48% compared to second quarter of 2016
- Cash position increased by \$13.2 million compared to December 31, 2016, ending with \$26.4 million of unrestricted cash and cash equivalents as of June 30, 2017
- Net income of \$6.4 million or \$0.29 per diluted share
- Based on invested RC facilities as of June 30, 2017, projected RC cash flows to ADES are between \$225 million and \$250 million through the end of 2021
- Obtained third party tax equity investor for a portion of an RC facility, of which the Company will own approximately 21%



FINANCIALS



FINANCIAL HIGHLIGHTS





SEGMENT RESULTS AND COMPONENTS OF EARNINGS

(In thousands)	Three Months Ended June 30,		Six Months Ended June 30,	
	2017	2016	2017	2016
RC segment operating income	\$ 11,133	\$ 14,199	\$ 26,158	\$ 22,061
EC segment operating income	1,887	2,118	2,160	6,700
Segment operating income	13,020	16,317	28,318	28,761
Adjustments to reconcile to net income				
Corporate payroll and benefits	(1,343)	(2,866)	(3,153)	(5,912)
Corporate rent and occupancy	(91)	(272)	(117)	(501)
Corporate legal and professional fees	(1,129)	(1,982)	(2,127)	(4,909)
Corporate general and administrative	(797)	(1,373)	(1,656)	(2,146)
Corporate depreciation and amortization	(51)	(128)	(258)	(258)
Corporate interest (expense) income, net	(59)	(1,214)	(283)	(2,121)
Other income (expense), net	500	(523)	3,400	(526)
Income tax expense	(3,642)	(99)	(9,028)	(152)
Net income	\$ 6,408	\$ 7,860	\$ 15,096	\$ 12,236



REFINED COAL



REFINED COAL ENVIRONMENT

The 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

Transaction Complexity

Accounting Treatment

Investor Business Priorities

Recent Publication of Technical Advice Memorandum (TAM) Brings Better Clarity



BENEFITS

Support Reliable Cleaner Energy

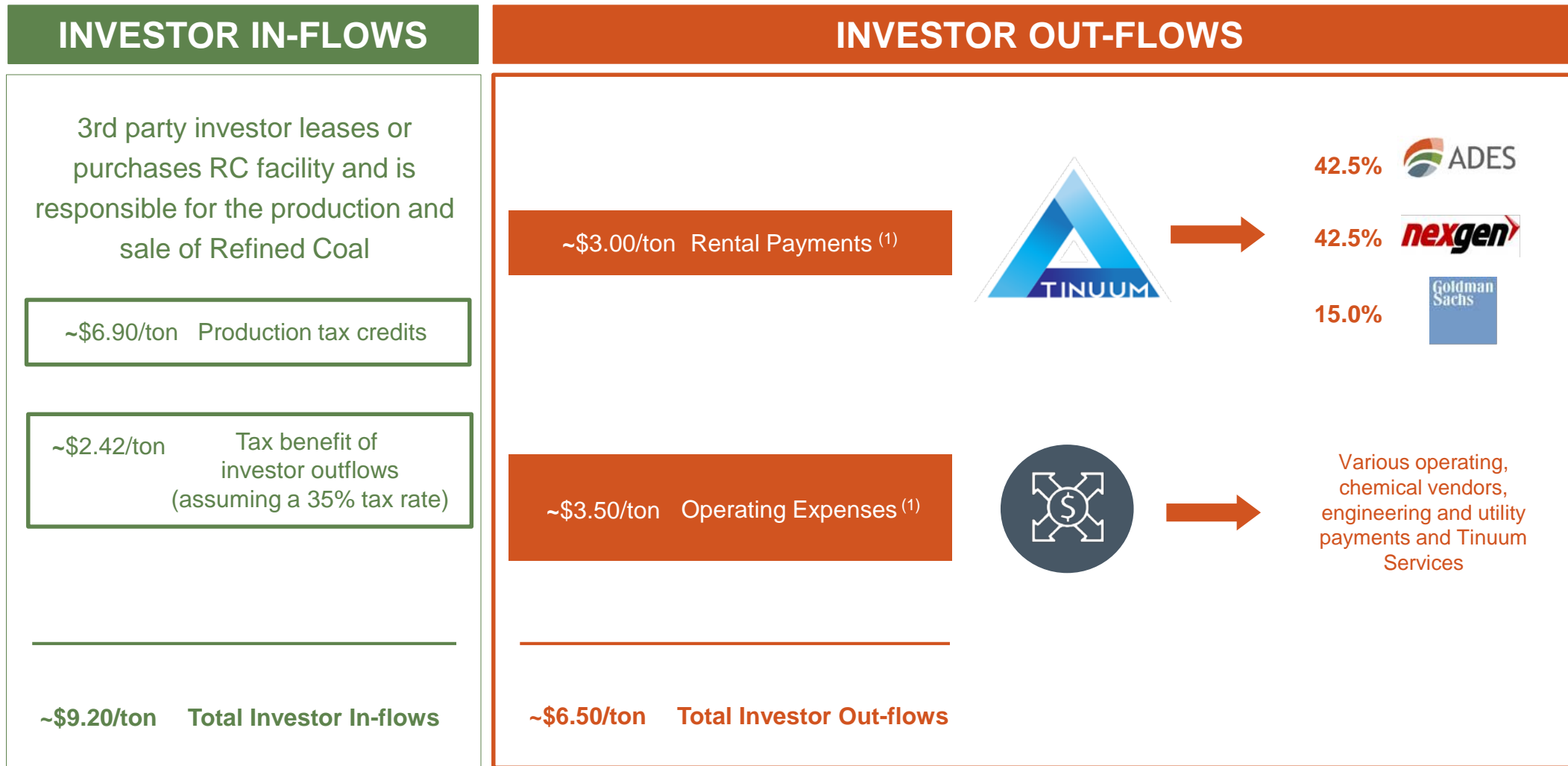
Net Income and EPS Improvement

Uniquely Strong Cash Returns

Rapid Return Of Capital



RC MODEL: INVESTOR ECONOMIC FLOW

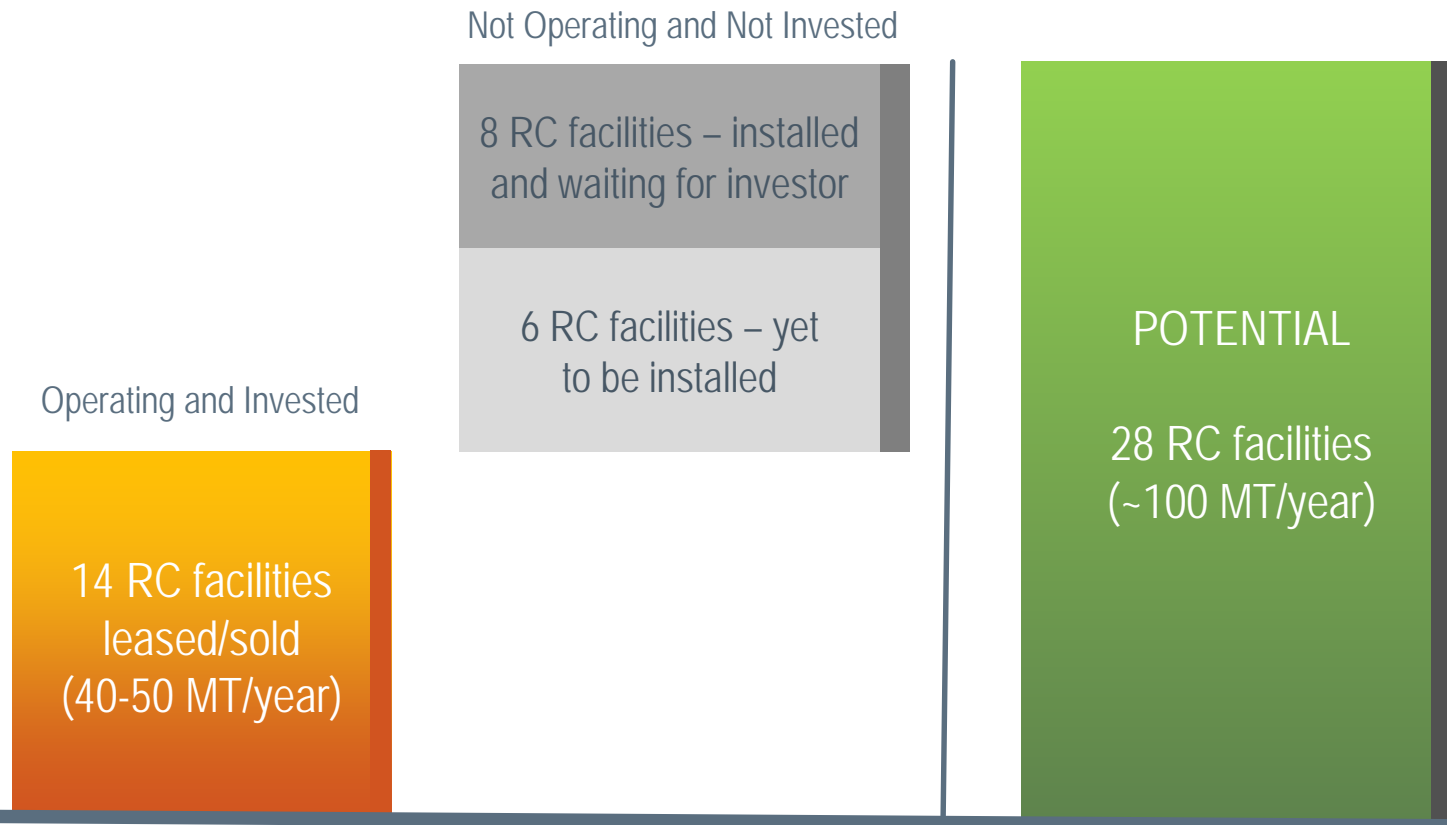


(1) Example is based on current market estimates based on June 30, 2017.



REFINED COAL FACILITIES TODAY AND TOMORROW

FULL-TIME OPERATIONS ROADMAP

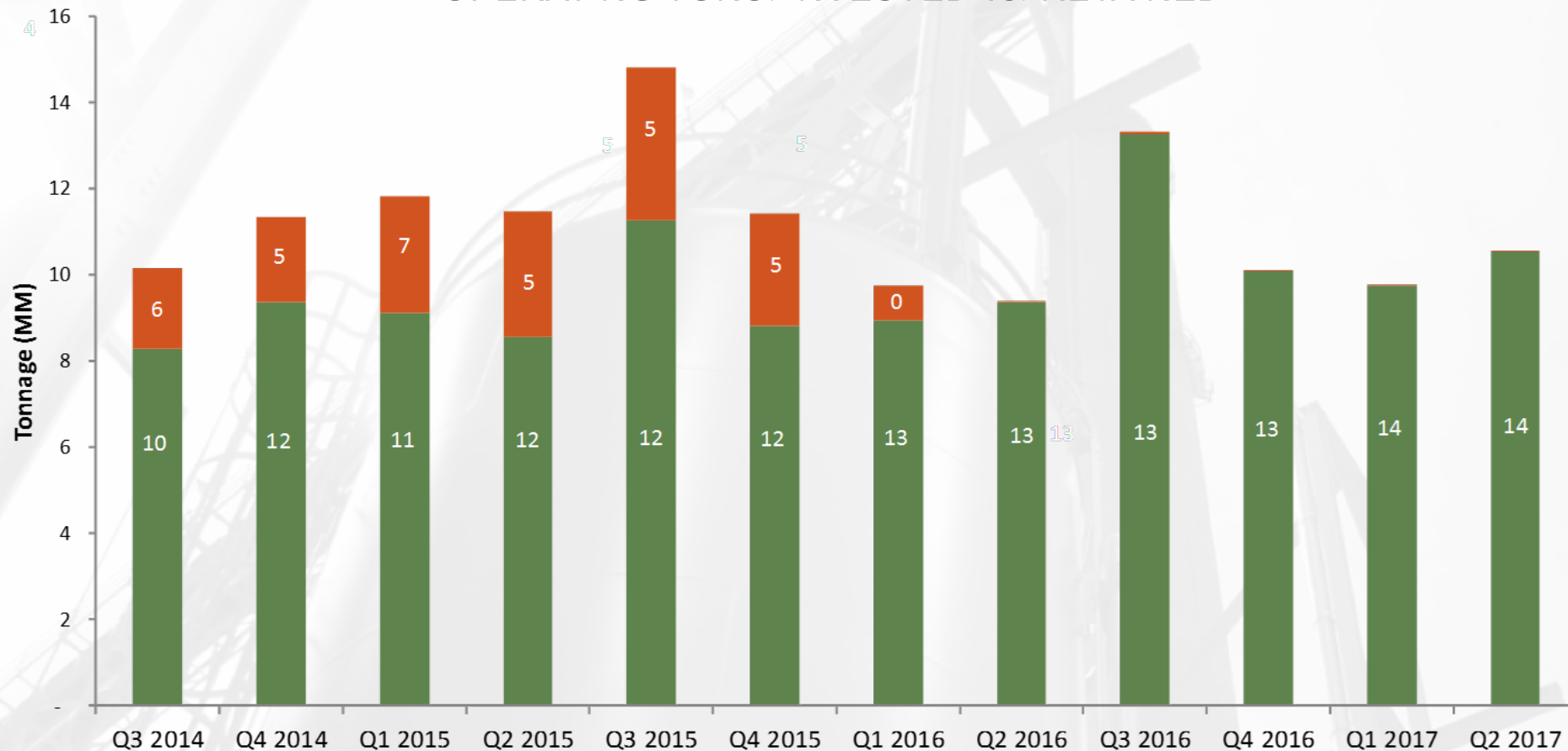


RC Facility information as of June 30, 2017

2017 - 2021



OPERATING TONS: INVESTED vs. RETAINED



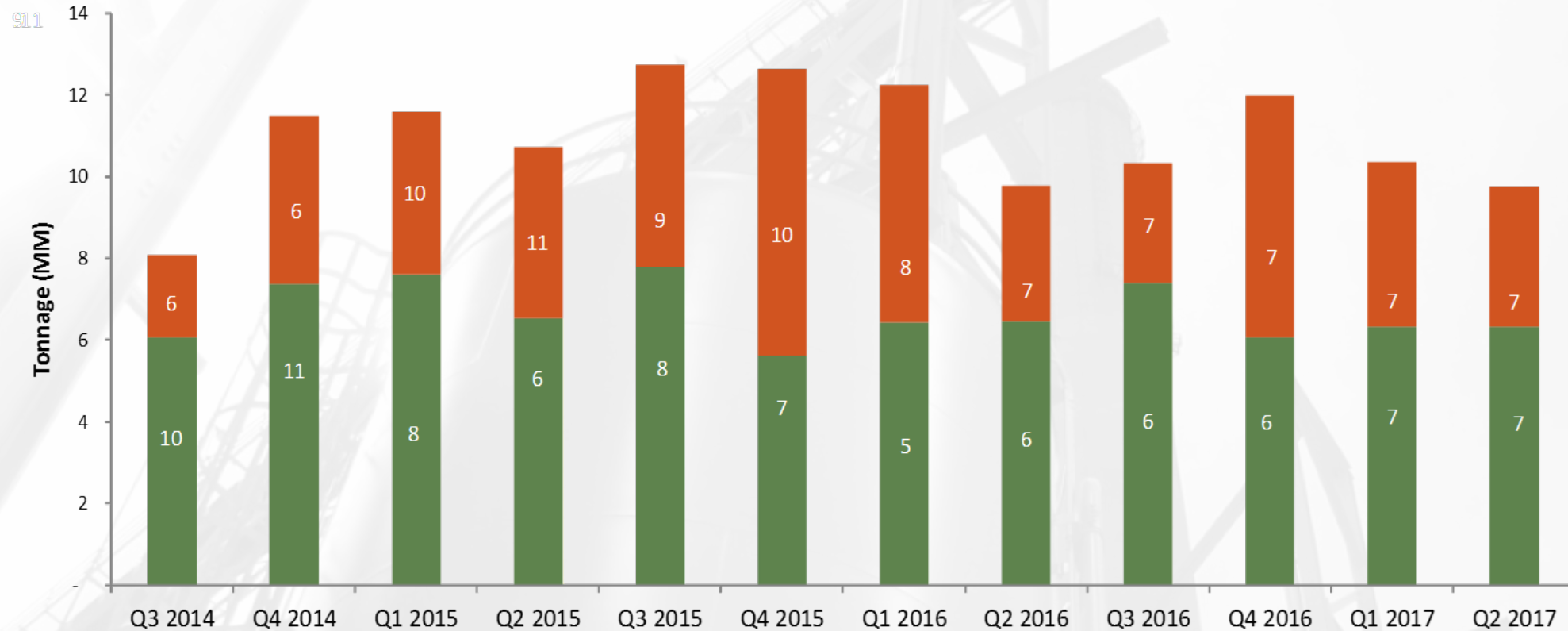
Three Month Ended June 30, 2017	Invested	Retained	QTD - Total
Tonnage ⁽¹⁾	10,537	12	10,549
Count (#)	14	-	14

Six Months Ended June 30, 2017	Invested	Retained	YTD - Total
Tonnage ⁽¹⁾	20,283	33	20,316
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 and six months ended June 30, 2017 (in thousands)



OPERATING TONS: ROYALTY VS. NON-ROYALTY



Three Month Ended June 30, 2017	Operating Tons		QTD - Total
	Royalty	Non-Royalty	
Tonnage ⁽¹⁾	4,267	6,282	10,549
Count (#) ⁽²⁾	7	7	14

Six Months Ended June 30, 2017	Operating Tons		YTD - Total
	Royalty	Non-Royalty	
Tonnage ⁽¹⁾	7,669	12,647	20,316
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 months ended June 30, 2017 (in thousands)

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



EMISSIONS CONTROL

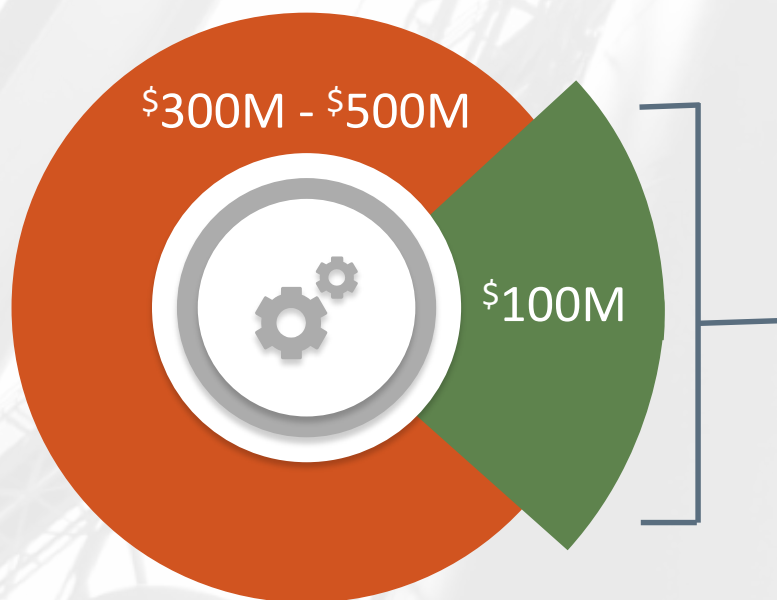




EMISSIONS CONTROL: CURRENT OPPORTUNITY

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

CHALLENGES

- Displacement of incumbent competitors
- Change adverse customers

⁽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



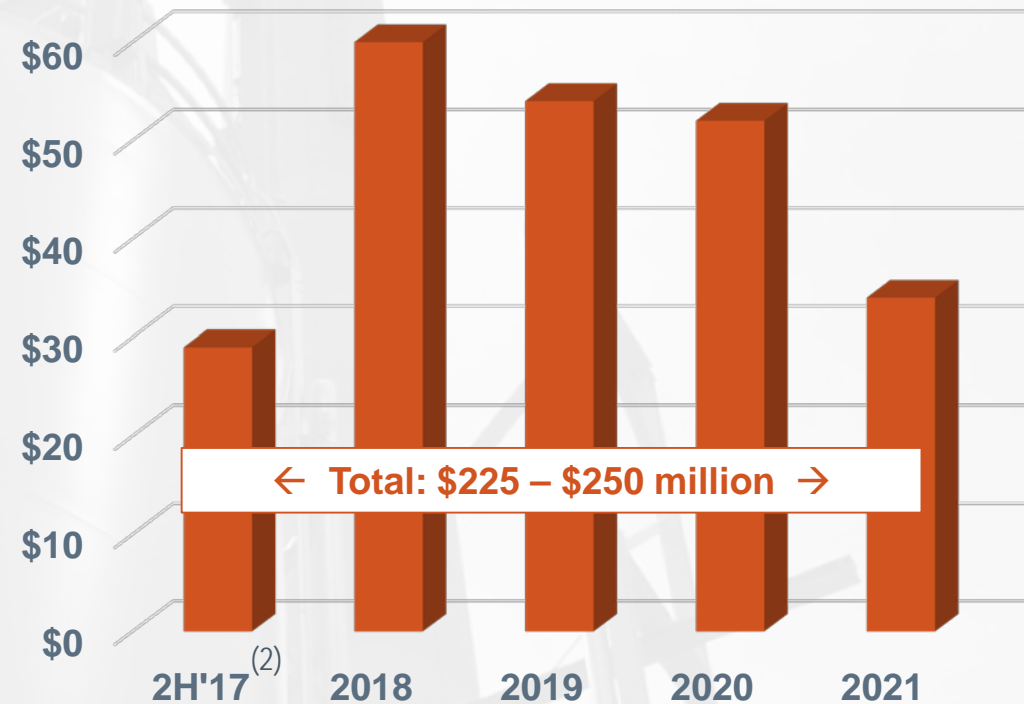
Future Cash Flows for ADES & 2017 Priorities



EXPECTED FUTURE ADES CASH FLOWS

- Based on 14 invested facilities as of June 30, 2017 and includes all consolidated cash flows of ADES
- Results in expected cash flows of \$225M to \$250M to ADES in total through 2021 ⁽¹⁾
- Each additional refined coal facility could add between \$5-7 million annually
- Obtained third party tax equity investors for RC facilities in March and July 2017 ⁽³⁾

PROJECTED CASH FLOWS *(in millions)*



(1) The projection is based on the following four key assumptions: 1) Tinnium Group continues to not operate retained facilities; 2) Tinnium 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

(2) 2017 cash flows are from July 1, 2017 – December 31, 2017.

(3) Completion of bringing in new tax equity investor in a RC facility in July 2017 is not included in projections.



BALANCED CAPITAL ALLOCATION

Invest Organically



Organic investment and development of Emissions Control business, specifically consumable chemicals

Return Capital

Dividends



Paid first quarterly dividend of \$0.25 per share in June; announced third quarter dividend of \$0.25 per share

Stock Repurchase



Executed stock buy-back, repurchasing \$12.9 million in common stock

Grow Opportunistically



Opportunistically evaluating accretive M&A alternatives within dynamic market



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:

Executed stock buy-back for \$12.9 million

Executed dividend of \$0.25 per share in Q2

Declared Q3 quarterly dividend of \$0.25 per share

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



APPENDIX

Appendix A: 10-Q Balance Sheet⁽¹⁾

<i>(in thousands, except share data)</i>	As of	
	June 30, 2017	December 31, 2016
ASSETS		
Current assets:		
Cash and cash equivalents	\$ 26,373	\$ 13,208
Restricted cash	3,000	13,736
Receivables, net	1,958	8,648
Receivables, related parties, net	1,866	1,934
Costs in excess of billings on uncompleted contracts	—	25
Prepaid expenses and other assets	1,736	1,357
Total current assets	34,933	38,908
Property and equipment, net of accumulated depreciation of \$1,541 and \$2,920, respectively	468	735
Cost method investment	1,016	1,016
Equity method investments	2,739	3,959
Deferred tax assets	53,290	61,396
Other long-term assets	1,711	1,282
Total Assets	\$ 94,157	\$ 107,296
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Accounts payable	\$ 1,617	\$ 1,920
Accrued payroll and related liabilities	1,135	2,121
Billings in excess of costs on uncompleted contracts	1,884	4,947
Legal settlements and accruals	4,327	10,706
Other current liabilities	8,208	4,017
Total current liabilities	17,171	23,711
Legal settlements and accruals, long-term	1,076	5,382
Other long-term liabilities	2,234	2,038
Total Liabilities	20,481	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, 22,438,617 and 22,322,022 shares issued, and 21,076,726 and 22,024,675 shares outstanding at June 30, 2017 and December 31, 2016, respectively	22	22
Treasury stock, at cost: 1,370,891 and 0- shares as of June 30, 2017 and December 31, 2016, respectively	(12,973)	—
Additional paid-in capital	114,882	119,494
Accumulated deficit	(28,255)	(43,351)
Total stockholders' equity	73,676	76,165
Total Liabilities and Stockholders' Equity	\$ 94,157	\$ 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 June 30, 2017.

Appendix B: 10-Q Income Statement⁽¹⁾

<i>(in thousands, except per share data and percentages)</i>	Three Months Ended June 30,		Six Months Ended June 30,	
	2017	2016	2017	2016
Revenues:				
Equipment sales	\$ 24,619	\$ 8,213	\$ 29,727	\$ 29,919
Chemicals	846	613	3,127	1,047
Consulting services and other	—	125	—	320
Total revenues	25,465	8,951	32,854	31,286
Operating expenses:				
Equipment sales cost of revenue, exclusive of depreciation and amortization	22,650	5,437	26,793	22,470
Chemicals cost of revenue, exclusive of depreciation and amortization	645	255	2,403	396
Consulting services and other cost of revenue, exclusive of depreciation and amortization	—	77	—	212
Payroll and benefits	2,033	3,956	4,215	7,759
Rent and occupancy	255	632	300	1,026
Legal and professional fees	1,219	1,982	2,254	4,965
General and administrative	809	1,346	2,072	2,092
Research and development, net	(414)	(345)	(222)	(143)
Depreciation and amortization	118	223	600	454
Total operating expenses	27,315	13,563	38,415	39,231
Operating loss	(1,850)	(4,612)	(5,561)	(7,945)
Other income (expense):				
Earnings from equity method investments	10,155	13,754	23,969	19,331
Royalties, related party	1,866	669	3,621	1,859
Interest expense	(628)	(1,573)	(1,321)	(3,537)
Revision in estimated royalty indemnity liability	500	—	3,400	—
Other	7	(279)	16	2,680
Total other income	11,900	12,571	29,685	20,333
Income before income tax expense	10,050	7,959	24,124	12,388
Income tax expense	3,642	99	9,028	152
Net income	\$ 6,408	\$ 7,860	\$ 15,096	\$ 12,236
Earnings per common share (Note 1):				
Basic	\$ 0.29	\$ 0.36	\$ 0.68	\$ 0.55
Diluted	\$ 0.29	\$ 0.35	\$ 0.68	\$ 0.55
Weighted-average number of common shares outstanding:				
Basic	21,866	21,875	21,961	21,895
Diluted	21,880	22,187	21,981	22,204
Cash dividends declared per common share outstanding:	\$ 0.25	\$ —	\$ 0.25	\$ —

(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, 2017.

Appendix C: 10-Q Cash Flow⁽¹⁾

<i>(in thousands)</i>	Six Months Ended June 30,	
	2017	2016
Cash flows from operating activities		
Net income	\$ 15,096	\$ 12,236
Adjustments to reconcile net income to net cash used in operating activities:		
Depreciation and amortization	600	454
Debt prepayment penalty and amortization of debt issuance costs	73	1,380
Impairment of property, equipment, and inventory	—	517
Stock-based compensation expense	1,173	1,543
Earnings from equity method investments	(23,969)	(19,331)
Gain on sale of equity method investment	—	(2,078)
Gain on settlement of note payable and licensed technology	—	(1,019)
Other non-cash items, net	436	34
Changes in operating assets and liabilities:		
Receivables	6,690	(627)
Related party receivables	68	1,473
Prepaid expenses and other assets	(453)	806
Costs incurred on uncompleted contracts	25,634	17,201
Deferred tax asset, net	8,106	—
Other long-term assets	(767)	(2,630)
Accounts payable	(303)	(2,910)
Accrued payroll and related liabilities	(987)	(1,596)
Other current liabilities	(1,227)	(101)
Billings on uncompleted contracts	(28,671)	(20,910)
Other long-term liabilities	164	(1,954)
Legal settlements and accruals	(10,685)	2,767
Distributions from equity method investees, return on investment	2,875	5,900
Net cash used in operating activities	(6,147)	(8,845)

(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, 2017.

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

<i>(in thousands)</i>	Six Months Ended June 30,	
	2017	2016
Cash flows from investing activities		
Distributions from equity method investees in excess of cumulative earnings	22,313	14,875
Maturity of investment securities, restricted	—	336
Acquisition of property and equipment, net	(247)	(111)
Contributions to equity method investees	—	(223)
Proceeds from sale of equity method investment	—	1,773
Net cash provided by investing activities	22,066	16,650
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	—	(14,496)
Short-term borrowing loan costs and debt prepayment penalty	—	(807)
Repurchase of common shares to satisfy tax withholdings	(517)	(85)
Repurchase of common shares	(12,973)	—
Net cash used in financing activities	(13,490)	(15,388)
Increase (decrease) in Cash and Cash Equivalents and Restricted Cash	2,429	(7,583)
Cash and Cash Equivalents and Restricted Cash, beginning of period	26,944	20,973
Cash and Cash Equivalents and Restricted Cash, end of period	\$ 29,373	\$ 13,390
Supplemental disclosure of cash flow information:		
Cash paid for interest	\$ 1,791	\$ 1,436
Cash paid (refunded) for income taxes	\$ 839	\$ (72)
Supplemental disclosure of non-cash investing and financing activities:		
Stock award reclassification (liability to equity)	\$ —	\$ 899
Settlement of RCM6 note payable	\$ —	\$ 13,234
Non-cash reduction of equity method investment	\$ —	\$ 11,156
Dividends payable	\$ 5,268	\$ —

(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, 2017.