



Advanced Emissions Solutions, Inc.
Advancing Cleaner Energy

Fourth Quarter and Full Year 2017 Results Call

March 13, 2018





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"); future amount and timing of production and sale of RC; activities to return capital to stockholders; potential to add more RC facilities; Tinum Group's ability to lease or sell remaining RC facilities; future annual revenue goals; potential future value of our stock; potential pursuit of alternative strategic options. 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.



FOURTH QUARTER AND FULL YEAR 2017 HIGHLIGHTS

- Returned \$32.1 million to shareholders in 2017 through tender offer, share repurchase program and dividends
- Continued quarterly dividend; declared first quarter dividend of \$0.25 per share, paid in March 2018
- Tinum distributions to ADES were in line with expectations and totaled \$16.5 million during the fourth quarter of 2017; Tinum distributions were \$53.5 million for the year ended December 31, 2017, compared to \$46.2 million during 2016
- Obtained third party tax equity investor for two RC facilities during the fourth quarter. The Company and Tinum increased the number of RC facilities by four during the year ended December 31, 2017, resulting in a total of 17 invested facilities
- Reduced indirect operating costs by 35% compared to 2016
- Cash position increased by \$17.5 million compared to December 31, 2016, ending with \$30.7 million of unrestricted cash and cash equivalents as of December 31, 2017
- Full year net income of \$27.9 million or \$1.29 per diluted share
- Based on invested RC facilities as of December 31, 2017, the Company reaffirms its recently updated expected net RC cash flows to ADES are between \$275 million and \$300 million through the end of 2021



EXECUTION OF 2017 PRIORITIES

Obtain New Tax Equity Investors for RC



- Four RC facilities were invested during 2017
- Dedicated additional resources, which bolstered the pipeline
- Leverage improving political clarity and refined coal tax equity market

Return Capital

Dividends



- Paid quarterly dividend of \$0.25 per share in July, September and December;
- Declared and paid first quarter 2018 dividend of \$0.25 per share
- Paid \$15.7 million in dividends during 2017

Stock Repurchase



- Executed Dutch tender offer for \$13.0 million
- Executed stock repurchase for \$3.4 million

Grow EC & Continue Transformation



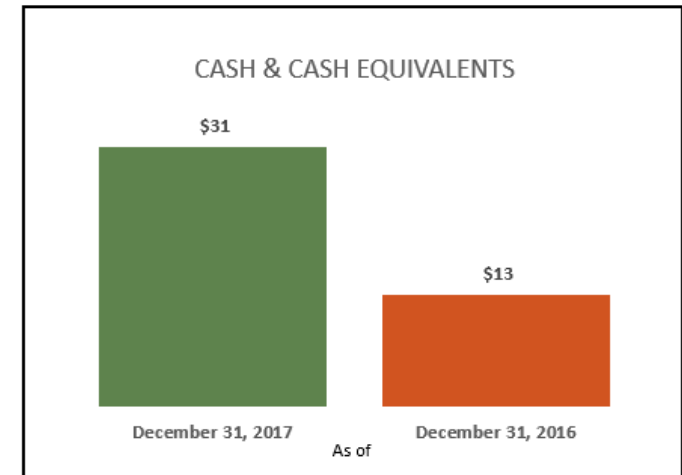
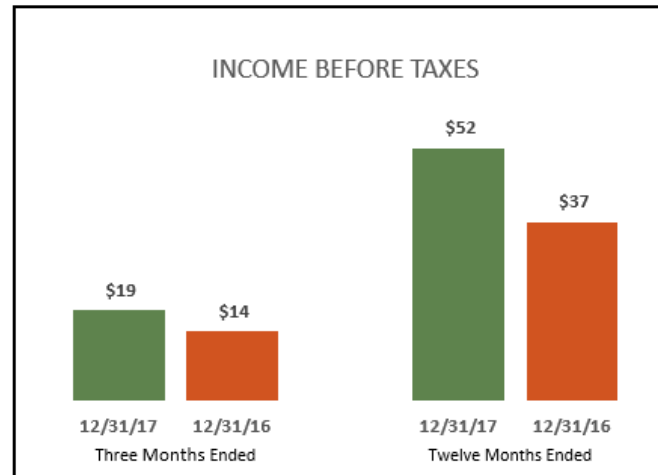
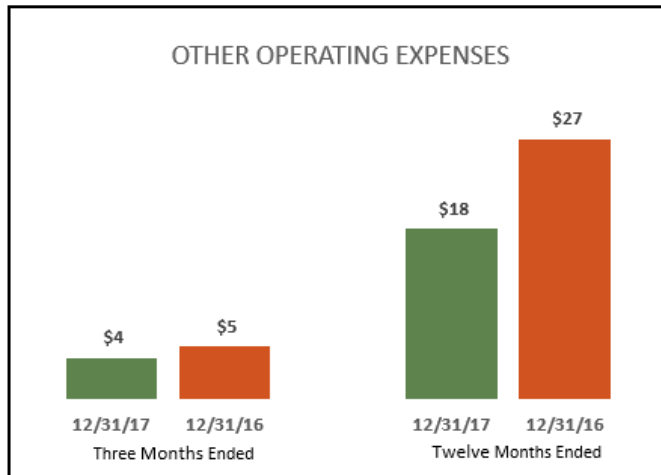
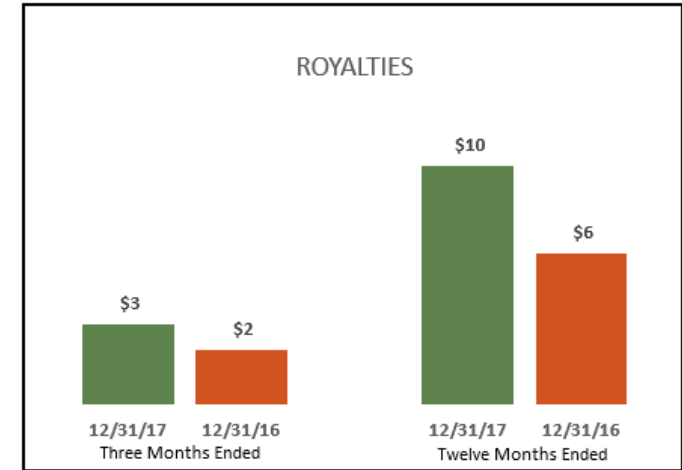
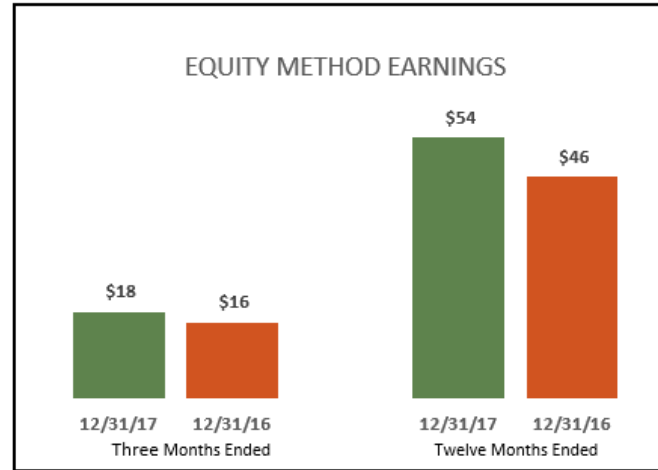
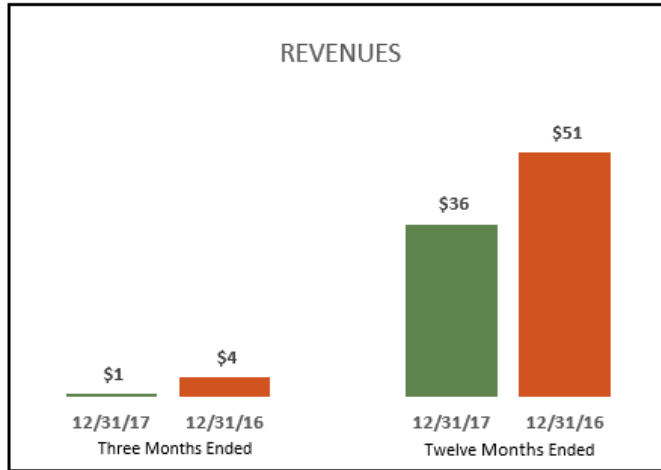
- Continued to grow sales of commercialized chemicals
- Further solidified path to monetize valuable intellectual property
- Explored targeted M&A



FINANCIALS



2017 FINANCIAL HIGHLIGHTS





REFINED COAL

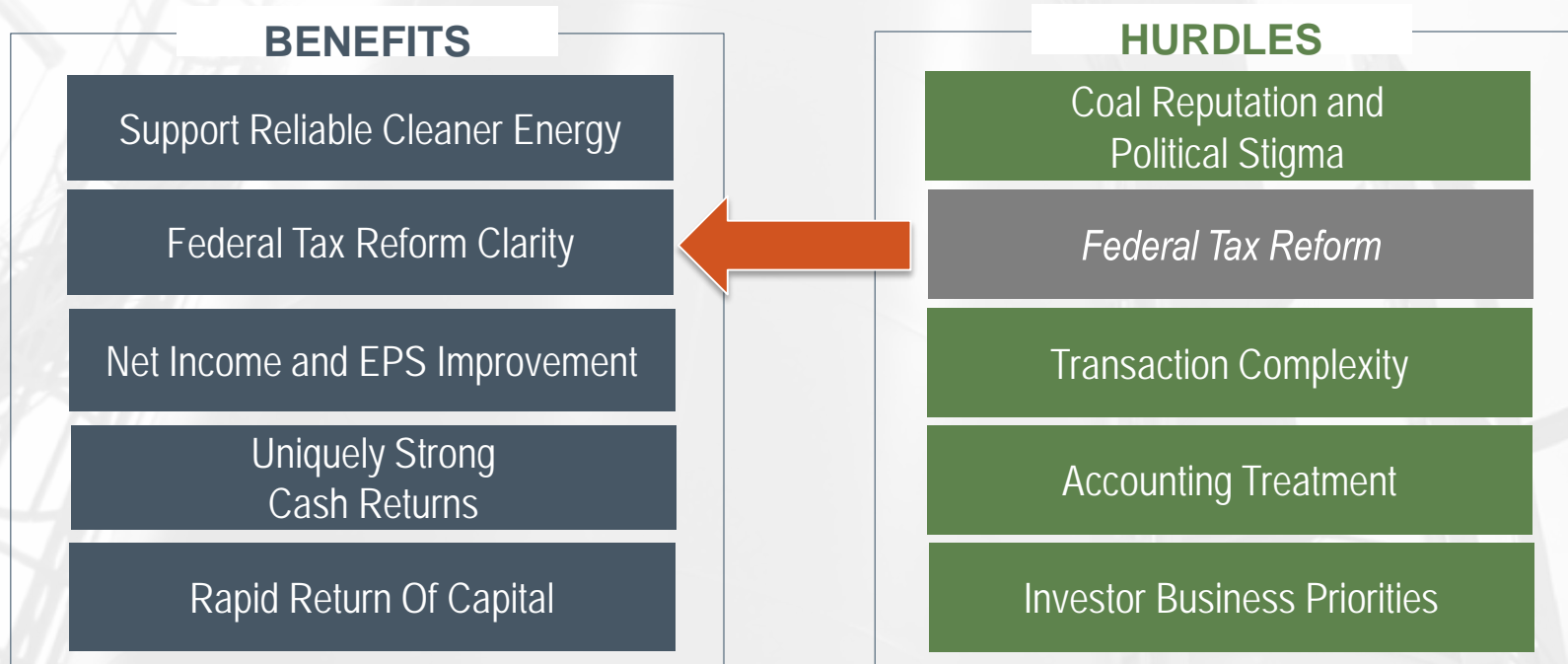


REFINED COAL ENVIRONMENT

The refined coal business is proven and yields many benefits to utilities, investors and the environment, and while the outlook is improving, there continues to be hurdles to overcome

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

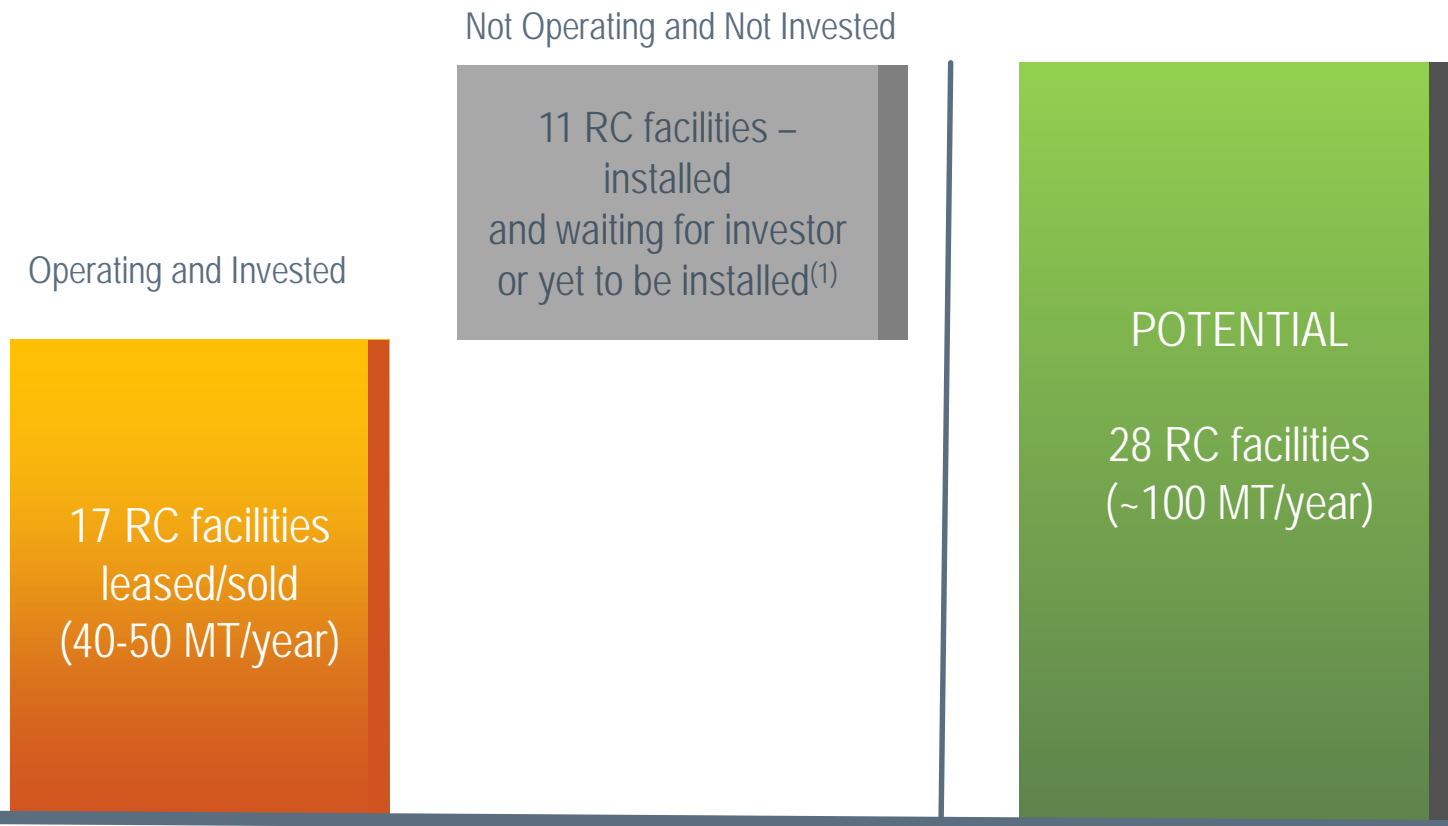
There are benefits *if* hurdles can be overcome





REFINED COAL FACILITIES TODAY AND TOMORROW

FULL-TIME OPERATIONS ROADMAP



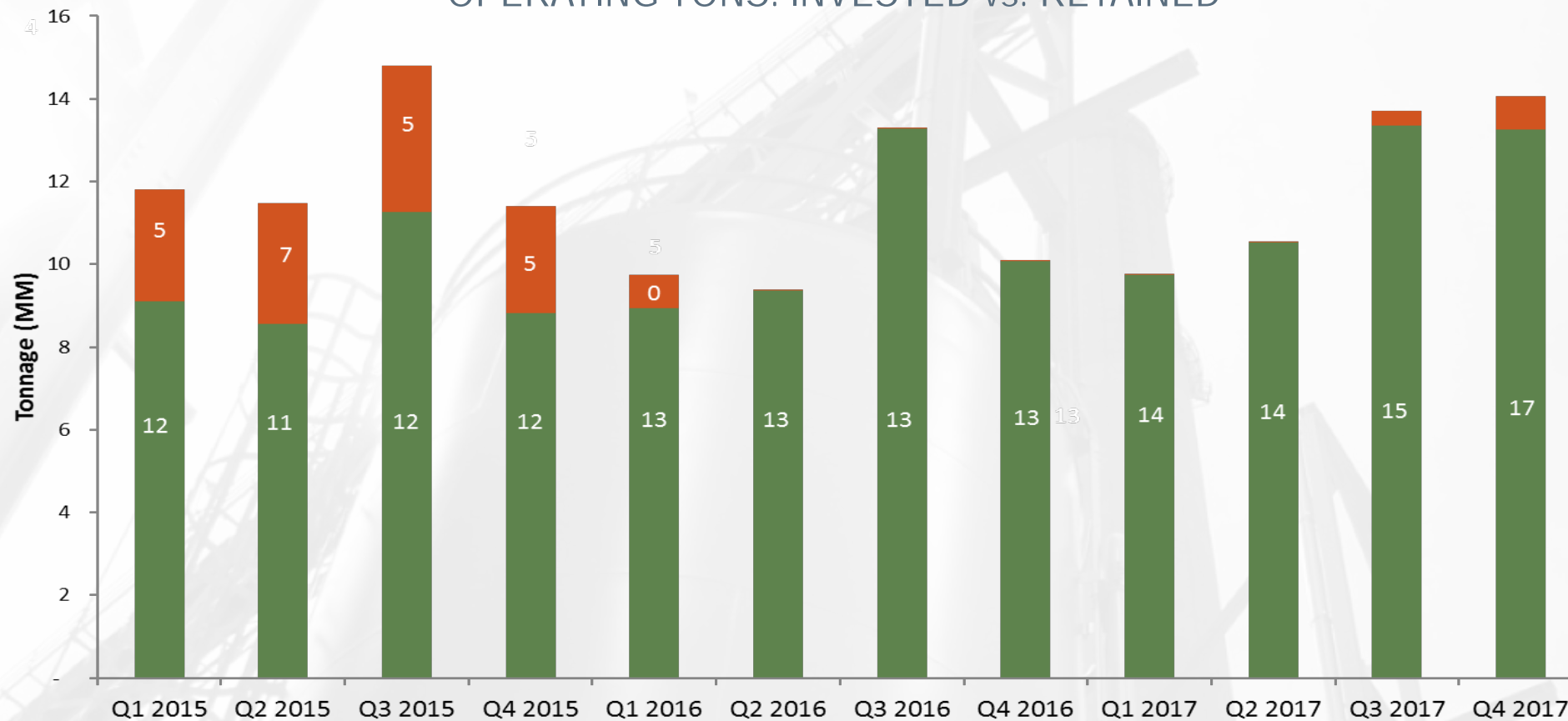
RC Facility information as of December 31, 2017

2018 - 2021

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



OPERATING TONS: INVESTED vs. RETAINED



Three Month Ended December 31, 2017	Invested	Retained	QTD - Total
Tonnage ⁽¹⁾	13,260	800	14,060
Count (#) ⁽²⁾	17	-	17

Twelve Months Ended December 31, 2017	Invested	Retained	YTD - Total
Tonnage ⁽¹⁾	46,887	1,187	48,074
Count (#) ⁽²⁾	17	-	17

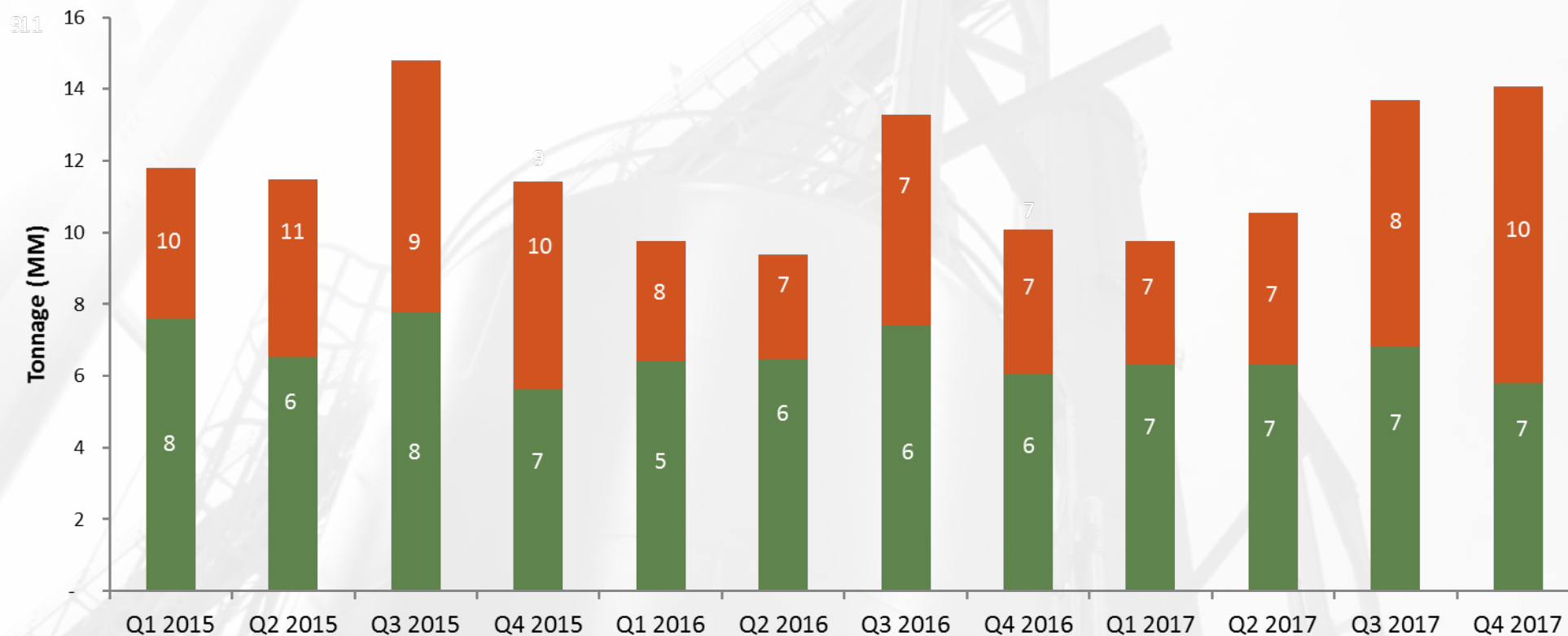
Note: Numbers within bar graph represent the number of facilities per category as of the end of each quarter presented

(1) Tonnage information is based upon RC production for the three and twelve months ended December 31, 2017 (in thousands)

(2) During Q3 2017, a 15th RC facility became approximately 50% invested with an independent 3rd party. The remaining ~50% is retained by Tinuum Group, NexGen and the Company; the Company benefits from the tax credits attained.



OPERATING TONS: ROYALTY VS. NON-ROYALTY



Three Month Ended December 31, 2017	Operating Tons		QTD - Total
	Royalty	Non-Royalty	
Tonnage ⁽¹⁾	8,254	5,806	14,060
Count (#) ⁽²⁾	10	7	17

Twelve Months Ended December 31, 2017	Operating Tons		YTD - Total
	Royalty	Non-Royalty	
Tonnage ⁽¹⁾	22,795	25,279	48,074
Count (#) ⁽²⁾	10	7	17

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 twelve months ended December 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

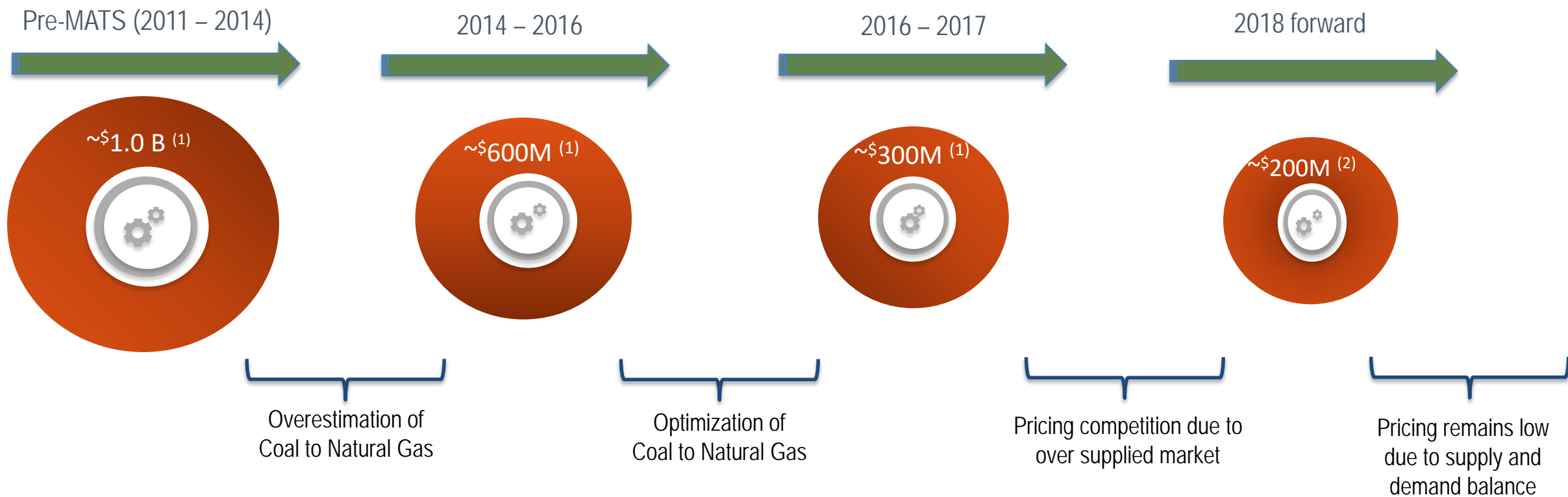




EMISSIONS CONTROL: MARKET UPDATE

- Decreases in mercury control market demand were of a greater magnitude and speed than what we and other market participants anticipated
- Expect that there will be significant consolidation amongst market participants in upcoming 24 months

NORTH AMERICAN MERCURY CONTROL ANNUAL MARKET SIZE TIMELINE



(1) Market size based on hindsight estimates and current information on historical industry pricing, including products such as Powder Activated Carbon (PAC), Halogen and Re-emissions.

(2) Based on management's estimate that industry pricing will normalize according to current pricing trends

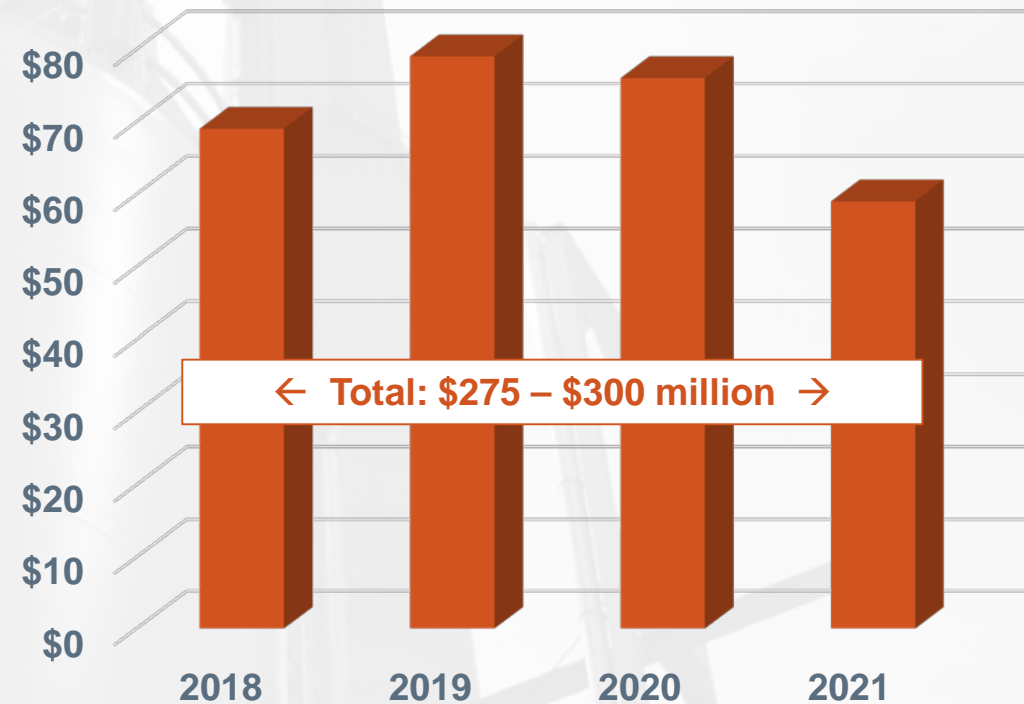


Future Cash Flows for ADES & 2018 Priorities

EXPECTED FUTURE NET RC ADES CASH FLOWS

- Based on 17 invested facilities as of December 31, 2017 and includes all net RC cash flows of ADES ⁽¹⁾
- Results in expected net RC cash flows of \$275M to \$300M to ADES in total through 2021 ⁽²⁾
- Each additional refined coal facility could add between \$5-7 million annually
- Obtained third party tax equity investors for RC facilities in March, July and November 2017
- Additionally, net cash flow usage from Corporate, offset by EC segment contributions, are estimated to range from \$8-10 million annually on a run rate basis⁽³⁾

EXPECTED CASH FLOWS FROM RC BUSINESS ⁽¹⁾ (in millions)



(1) Net RC cash flows includes the impact of all Tinum distributions and royalty payments offset by the Company's federal and state tax payments as well as interest payments

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

(3) Net cash flow usage does not include payment of potential quarterly dividends or share repurchases and is after additional cost adjustments



2018 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 Tinum and public platform while also reducing expenses



RETURN CAPITAL TO STOCKHOLDERS:

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

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



EVALUATE ALTERNATIVE OPTIONS:

Evaluate options, including:

- Monetization of current or future tax assets
- Look to build upon current public platform
- Properly position for market transformation



APPENDIX

Appendix A: 10-K Balance Sheet⁽¹⁾

<i>(in thousands, except share data)</i>	As of December 31,	
	2017	2016
ASSETS		
Current assets:		
Cash and cash equivalents	\$ 30,693	\$ 13,208
Restricted cash	—	13,736
Receivables, net	1,113	8,648
Receivables, related party	3,247	1,934
Prepaid expenses and other assets	1,835	1,382
Total current assets	<u>36,888</u>	<u>38,908</u>
Property and equipment, net of accumulated depreciation of \$1,486 and \$2,920, respectively	410	735
Equity method investments	4,351	3,959
Deferred tax assets	38,661	61,396
Other assets	2,308	2,298
Total Assets	<u>\$ 82,618</u>	<u>\$ 107,296</u>
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Accounts payable	\$ 1,000	\$ 1,920
Accrued payroll and related liabilities	1,384	2,121
Billings in excess of costs on uncompleted contracts	1,830	4,947
Legal settlements and accruals	—	10,706
Other current liabilities	2,664	4,017
Total current liabilities	<u>6,878</u>	<u>23,711</u>
Legal settlements and accruals, long-term	—	5,382
Other long-term liabilities	2,285	2,038
Total Liabilities	<u>9,163</u>	<u>31,131</u>
Commitments and contingencies (Note 4)		
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, 22,465,821 and 22,322,022 shares issued and 20,752,055 and 22,024,675 shares outstanding at December 31, 2017 and 2016, respectively	22	22
Treasury stock, at cost: 1,713,766 and zero shares as of December 31, 2017 and 2016, respectively	(16,397)	—
Additional paid-in capital	105,308	119,494
Accumulated deficit	(15,478)	(43,351)
Total stockholders' equity	<u>73,455</u>	<u>76,165</u>
Total Liabilities and Stockholders' Equity	<u>\$ 82,618</u>	<u>\$ 107,296</u>

(1) See complete Consolidated Financial Statements and Notes related thereto within the Annual Report on Form 10-K for the period ended December 31, 2017.

Appendix B: 10-K Income Statement⁽¹⁾

<i>(in thousands, except per share data)</i>	Years Ended December 31,		
	2017	2016	2015
Revenues:			
Equipment sales	\$ 31,401	\$ 46,949	\$ 60,099
Chemicals	4,246	3,025	888
Consulting services and other	45	648	1,752
Total revenues	<u>35,692</u>	<u>50,622</u>	<u>62,739</u>
Operating expenses:			
Equipment sales cost of revenue, exclusive of depreciation and amortization	28,438	37,741	45,433
Chemicals cost of revenue, exclusive of depreciation and amortization	3,434	1,700	601
Consulting services and other cost of revenue, exclusive of depreciation and amortization	13	376	1,518
Payroll and benefits	7,669	12,390	23,589
Rent and occupancy	795	2,168	3,309
Legal and professional fees	4,354	8,293	16,604
General and administrative	3,857	3,721	6,104
Research and development, net	157	(648)	5,362
Depreciation and amortization	789	979	2,019
Total operating expenses	<u>49,506</u>	<u>66,720</u>	<u>104,539</u>
Operating loss	<u>(13,814)</u>	<u>(16,098)</u>	<u>(41,800)</u>
Other income (expense):			
Earnings from equity method investments	53,843	45,584	8,921
Royalties, related party	9,672	6,125	10,642
Interest income	54	268	24
Interest expense	(3,024)	(5,066)	(8,402)
Litigation settlement and royalty indemnity expense, net	3,269	3,464	—
Other	2,025	2,463	494
Total other income	<u>65,839</u>	<u>52,838</u>	<u>11,679</u>
Income (loss) before income tax expense	52,025	36,740	(30,121)
Income tax expense (benefit)	24,152	(60,938)	20
Net income (loss)	<u>\$ 27,873</u>	<u>\$ 97,678</u>	<u>\$ (30,141)</u>
Earnings (loss) per common share (Note 1):			
Basic	\$ 1.30	\$ 4.40	\$ (1.37)
Diluted	\$ 1.29	\$ 4.34	\$ (1.37)
Weighted-average number of common shares outstanding:			
Basic	21,367	21,931	21,773
Diluted	21,413	22,234	21,773
Cash dividends declared per common share outstanding:	\$ 0.75	\$ —	\$ —

(1) See complete Consolidated Financial Statements and Notes related thereto within the Annual Report on Form 10-K for the period ended December 31, 2017.

Appendix C: 10-K Cash Flow⁽¹⁾

<i>(in thousands)</i>	Years Ended December 31,		
	2017	2016	2015
Cash flows from operating activities			
Net income (loss)	\$ 27,873	\$ 97,678	\$ (30,141)
Adjustments to reconcile net income (loss) to net cash used in operating activities:			
Deferred tax benefit from release of valuation allowance	(474)	(61,396)	—
Depreciation and amortization	789	979	2,019
Debt prepayment penalty and amortization of debt issuance costs	109	1,380	987
Impairment of property, equipment, inventory, intangibles and cost method investment	464	2,280	2,087
Provision for accounts receivable and other receivables	385	13	633
Interest costs added to principal balance of notes payable	—	—	923
Share-based compensation expense, net	2,209	2,868	6,879
Earnings from equity method investments	(53,843)	(45,584)	(8,921)
Gain on sale of equity method investment	—	(2,078)	—
Gain on settlement of note payable, licensed technology, and sales-type lease	—	(1,910)	—
Other non-cash items, net	44	35	285
Changes in operating assets and liabilities, net of effects of acquired businesses:			
Receivables	6,743	(301)	8,361
Related party receivables	(1,313)	(16)	(479)
Prepaid expenses and other assets	(351)	1,195	(107)
Costs incurred on uncompleted contracts	27,048	29,623	6,492
Deferred tax asset, net	23,208	—	—
Other long-term assets	41	961	205
Accounts payable	(920)	(4,254)	(1,340)
Accrued payroll and related liabilities	(738)	(2,887)	(102)
Other current liabilities	(1,586)	(3,105)	(812)
Billings on uncompleted contracts	(30,140)	(32,272)	(15,186)
Advance deposit, related party	—	(2,980)	(3,544)
Other long-term liabilities	154	(2,175)	595
Legal settlements and accruals	(16,088)	(4,211)	(3,722)
Distributions from equity method investees, return on investment	4,638	7,900	5,019
Net cash used in operating activities	(11,748)	(18,257)	(29,869)

(1) See complete Consolidated Financial Statements and Notes related thereto within the Annual Report on Form 10-K for the period ended December 31, 2017.

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

<i>(in thousands)</i>	Years Ended December 31,		
	2017	2016	2015
Cash flows from investing activities			
Distributions from equity method investees in excess of cumulative earnings	48,875	38,250	8,651
Maturity of investment securities, restricted	—	336	—
Acquisition of property and equipment	(485)	(289)	(507)
Proceeds from sale of property and equipment	57	52	942
Advance on note receivable	—	—	(500)
Acquisition of business	—	—	(2,124)
Purchase of and contributions to equity method investee	(61)	(223)	(2,128)
Proceeds from sale of equity method investment	—	1,773	—
Net cash provided by investing activities	48,386	39,899	4,334
Cash flows from financing activities			
Borrowings on Line of Credit	808	—	—
Repayments on Line of Credit	(808)	—	—
Short-term borrowings	—	—	13,539
Repayments on short-term borrowings and notes payable, related party	—	(14,496)	(3,234)
Short-term borrowing loan costs and debt prepayment penalty	(236)	(979)	—
Repurchase of shares to satisfy tax withholdings	(566)	(196)	(276)
Dividends paid	(15,690)	—	—
Repurchase of common shares	(16,397)	—	—
Net cash (used in) provided by financing activities	(32,889)	(15,671)	10,029
Increase (Decrease) in Cash and Cash Equivalents and Restricted Cash	3,749	5,971	(15,506)
Cash and Cash Equivalents and Restricted Cash, beginning of year	26,944	20,973	36,479
Cash and Cash Equivalents and Restricted Cash, end of year	\$ 30,693	\$ 26,944	\$ 20,973
Supplemental disclosure of cash flow information:			
Cash paid for interest	\$ 3,644	\$ 3,647	\$ 6,274
Cash paid for income taxes, net of refunds received	\$ 1,672	\$ 541	\$ 29
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	\$ —
Stock award reclassification (liability to equity)	\$ —	\$ 899	\$ —
Dividends payable	\$ 139	\$ —	\$ —

(1) See complete Consolidated Financial Statements and Notes related thereto within the Annual Report on Form 10-K for the period ended December 31, 2017.