Casella Waste Systems, Inc.

KeyBanc Capital Markets 2017 Industrial, Automotive & Transportation Conference

June 2017

Safe harbor statement

Certain matters discussed in this presentation, including, but not limited to, the statements regarding financial results and guidance, are "forward-looking statements" intended to qualify for the safe harbors from liability established by the Private Securities Litigation Reform Act of 1995. These forward-looking statements can generally be identified as such by the context of the statements, including words such as "believe," "expect," "anticipate," "plan," "may," "would," "intend," "estimate," "guidance" and other similar expressions, whether in the negative or affirmative. These forward-looking statements are based on current expectations, estimates, forecasts and projections about the industry and markets in which the Company operates and management's beliefs and assumptions. The Company cannot guarantee that it actually will achieve the financial results, plans, intentions, expectations or guidance disclosed in the forward-looking statements made. Such forward-looking statements, and all phases of the Company's operations, involve a number of risks and uncertainties, any one or more of which could cause actual results to differ materially from those described in its forward-looking statements. Such risks and uncertainties include or relate to, among other things: the outcome of its expansion efforts and related matters at the Southbridge landfill, including the uncertainty of the permitting process and groundwater contamination discovered near the landfill, which may delay or negatively impact its permitting activities at that landfill and result in increased costs and liabilities as well as potentially leading to a discontinuation of operations at the landfill; adverse weather conditions that have negatively impacted and may continue to negatively impact its revenues and its operating margin; current economic conditions that have adversely affected and may continue to adversely affect its revenues and its operating margin; the Company may be unable to increase volumes at its landfills or improve its route profitability; the Company's need to service its indebtedness may limit its ability to invest in its business; the Company may be unable to reduce costs or increase

pricing or volumes sufficiently to achieve estimated Adjusted EBITDA and other targets; landfill operations and permit status may be affected by factors outside its control; the Company may be required to incur capital expenditures in excess of its estimates; fluctuations in energy pricing or the commodity pricing of its recyclables may make it more difficult for the Company to predict its results of operations or meet its estimates; the Company may incur environmental charges or asset impairments in the future; and the Company's credit facility agreement requires it to meet a number of financial ratios and covenants. There are a number of other important risks and uncertainties that could cause the Company's actual results to differ materially from those indicated by such forward-looking statements. These additional risks and uncertainties include, without limitation, those detailed in Item 1A, "Risk Factors" in the Company's Form 10-K for the fiscal year ended December 31, 2016.

The Company undertakes no obligation to update publicly any forward-looking statements whether as a result of new information, future events or otherwise, except as required by law.



Casella Waste Systems - Overview

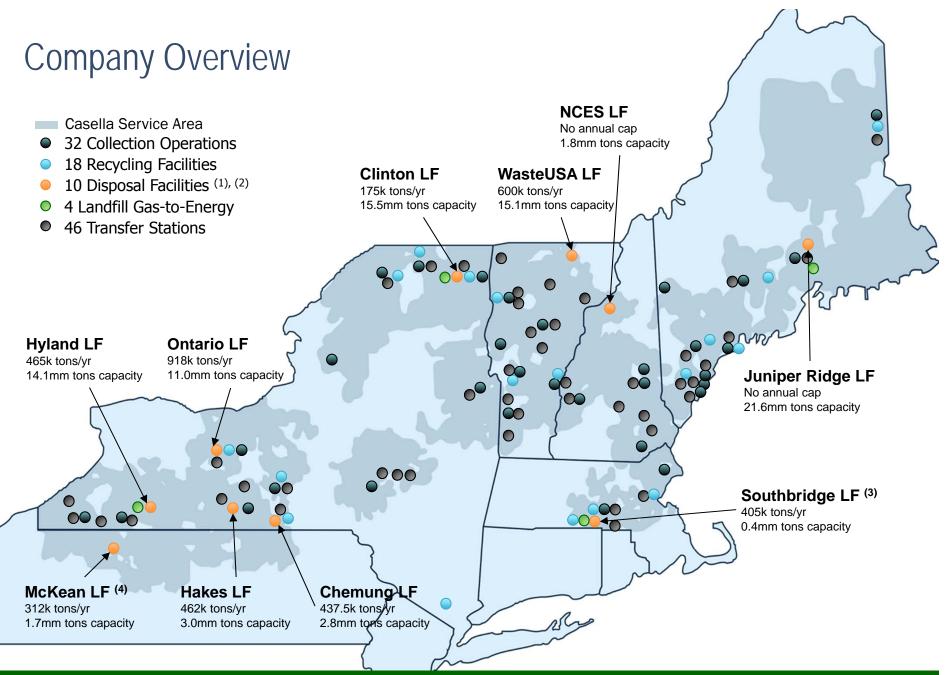
Casella provides integrated solid waste, recycling and resource services.

- \$573.4mm of revenues for the 12-months ended 3/31/17.
- Integrated operations located in six northeast states.
- Emphasis on integrated waste operations including: disposal, recycling and Customer Solutions.

Focused on providing customers with waste and resource solutions.

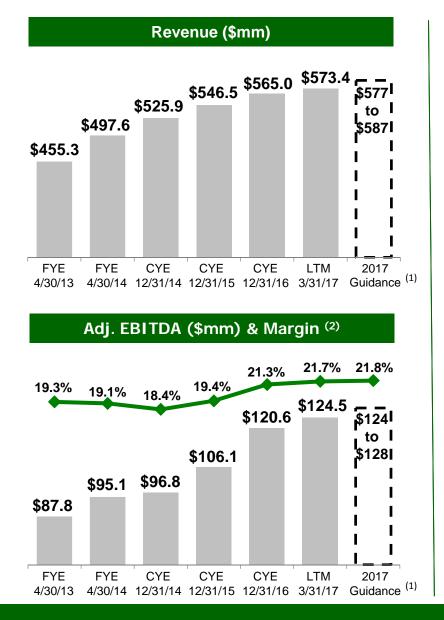
- Waste and resource assets are well positioned in the northeast.
- Robust transfer network allows us to effectively move waste and recyclables to our disposal & processing facilities.
- Provide customers with value-added resource solutions through our Recycling, Organics, and Customer Solutions operations.





(1) Includes nine Subtitle D landfills and one landfill permitted to accept construction and demolition materials. (2) Total disposal capacity includes permitted and permittable airspace estimates at each site as of 12/31/16. (3) Total disposal capacity at Southbridge only reflects permitted airspace as of 12/31/16, please refer to Item 1A *Risk Factors* and Item 3 *Legal Proceedings* in the Company's Form 10-K for the fiscal year ended 12/31/16, a , and Part II Item 1: Legal Proceedings in Form 10-Q for Q1 2017; (4) Annual capacity does not include the 1.5mm tons/yr rail permit at McKean LF.

Results up significantly on strategic execution



LTM 3/31/17 as compared to FYE 4/30/13:

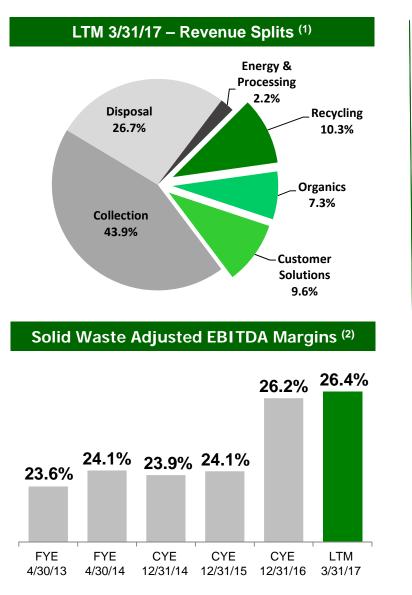
- Revenue growth +\$118.1mm (or +25.9%) mainly driven by Disposal (+\$45.2mm)⁽³⁾, Collection (+\$43.0mm), and Customer Solutions (+\$19.8mm).
- Adj. EBITDA up +\$36.6mm (or +41.7%) mainly driven by strong pricing, higher landfill volumes and strategic execution.
- Landfill tons up +720k annually (or +20.2%), while increasing pricing by +4.5%.⁽³⁾
- Collection price increases (up +3.6% in LTM Q1 2017).

⁽¹⁾ CY 2017 Guidance as provided on 3/1/17 and reaffirmed on 5/4/17.

⁽²⁾ Please refer to the appendix for further information and a reconciliation of Adjusted EBITDA to the most directly comparable GAAP measure, which is net loss. Net loss was (\$54.5mm) for the fiscal year ended 4/30/13, (\$27.4mm) for the fiscal year ended 4/30/14, (\$29.1mm) for the calendar year ended 12/31/14, (\$11.8mm) for the fiscal year ended 12/31/15, (\$6.9mm) for the fiscal year ended 12/31/16, and \$0.5mm for the 12 months ended 3/31/17.

⁽³⁾ Disposal Revenue includes the impact of Worcester landfill and various acquisitions, whereas landfill volumes excludes the low-priced soils at the Worcester landfill closure project.

Solid Waste operations driving improving margins



~73% revenues in Solid Waste.

- Solid Waste consists of integrated collection, transfer, landfill, energy, and processing services.
- Margin improvement driven by higher landfill tons, pricing, cost efficiencies, and asset repositioning.
- Target Adj. EBITDA margins > 27% in CYE 2018.

~27% revenues in Resource Solutions.⁽¹⁾

- Resource Solutions consists of Recycling, Organics, and Customer Solutions operations.
- Recycling margins improving with the implementation of our SRA Fee, contract resets, and operating efficiencies.
- Organics margins flat; lower margin, higher return business.
- Customer Solutions margins up on industrial services growth and higher G&A leverage.

Strategic plan expected to drive significant shareholder value

	Results before announcing CY 2018 plan				Tracking ahead of multi-year plan						
	CY 2014 Actuals		CY 2018 Financial Targets ⁽¹⁾		LTM 3/31/17 Actuals	CY 2017 Guidance Ranges ⁽¹⁾					
Revenues	\$525.9mm	➡	\$562mm to \$583mm		\$573.4mm	\$577mm to \$587mm					
Adjusted EBITDA (2)	\$96.8mm	•	\$122mm to \$132mm		\$124.5mm	\$124mm to \$128mm					
Normalized Free Cash Flow ⁽²⁾	\$9.3mm	•	\$30mm to \$40mm		\$36.5mm	\$32mm to \$36mm					
Total Debt-to- EBITDA ⁽³⁾	5.42x	•	3.25x to 3.75x	-	4.07x	N/A					

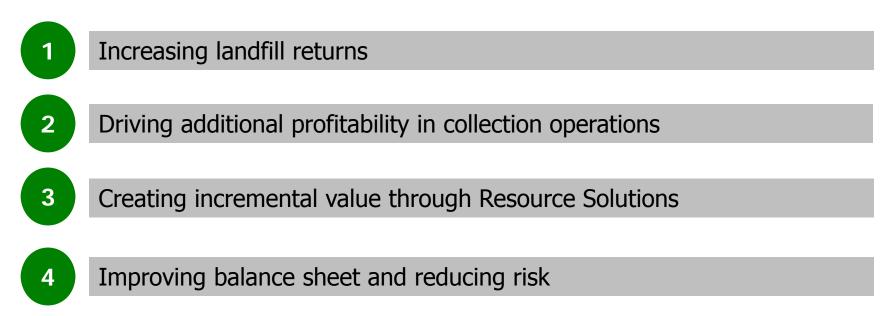
⁽¹⁾ CY 2017 Guidance as announced on 3/1/17 and reaffirmed on 5/4/17; CY 2018 Financial Targets as first presented on 8/11/15.

(3) Total Debt-to-EBITDA as defined as "*Consolidated Net Leverage Ratio*" in the our Credit Agreement dated as of 10/17/16 ("ABL Revolver"); Total Debt-to-EBITDA as defined as "*Consolidated Leverage Ratio*" in the our Loan & Security Agreement dated as of 2/27/15 ("ABL Revolver") for CY 2015; and calculated as of last day of each above listed period.

⁽²⁾ Adjusted EBITDA and Normalized Free Cash Flow as defined in the appendix reconciliation. Casella does not provide reconciling information for forward-looking periods because such information is not available without an unreasonable effort. Casella believes that such information is not significant to an understanding of its non-GAAP measures for forward-looking periods because its methodology for calculating such non-GAAP measures is based on sensitivity analysis at the business unit level rather than on differences from GAAP financial measures.

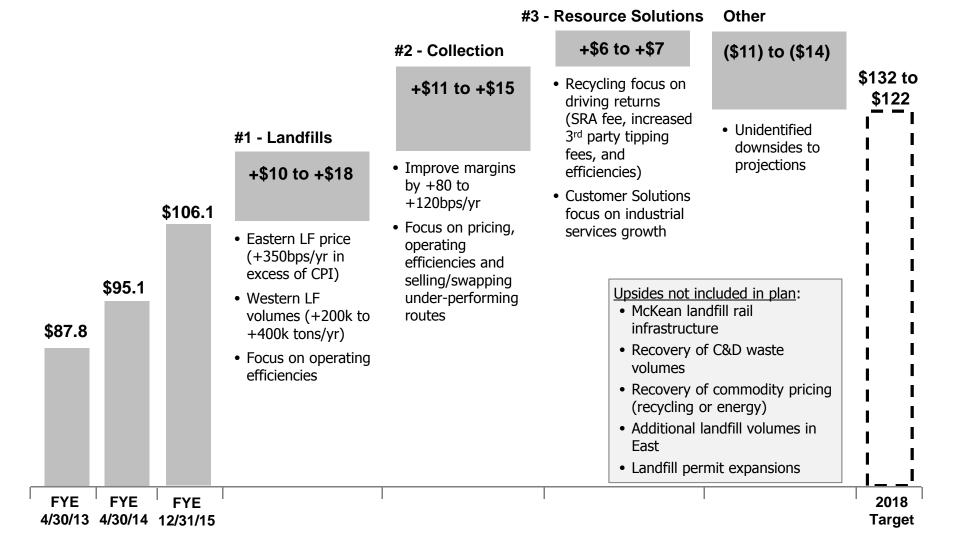
Strategic plan driving significant shareholder value

Management focused on key areas to increase free cash flow and to reduce debt leverage:



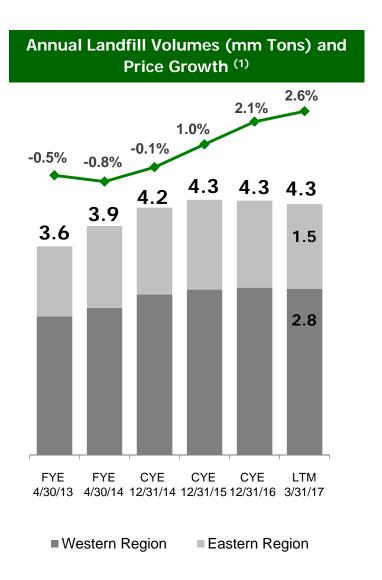
Tracking to the higher end of CYE 2018 financial plan

Adjusted EBITDA Bridge (\$mm)





Increasing landfill returns



Landfill Highlights:

- Casella controls 10 landfills in strategic locations across the Northeast.
- Total disposal capacity ~90.1mm tons.⁽²⁾
- Total annual landfill volumes up +720k tons (or +20.2%) since FYE 2013.
- Roughly 1.0mm tons of excess annual permitted capacity at 3/31/17.
- Hyland LF annual permit increased by +150k tons/yr in Jan 2016.
- Ontario LF total permitted capacity increased by +15.7mm cyds in Jan 2016.
- Chemung LF total permitted capacity increased by +8.2mm cyds and increased the annual permit by 237k tons/yr in Jun 2016.

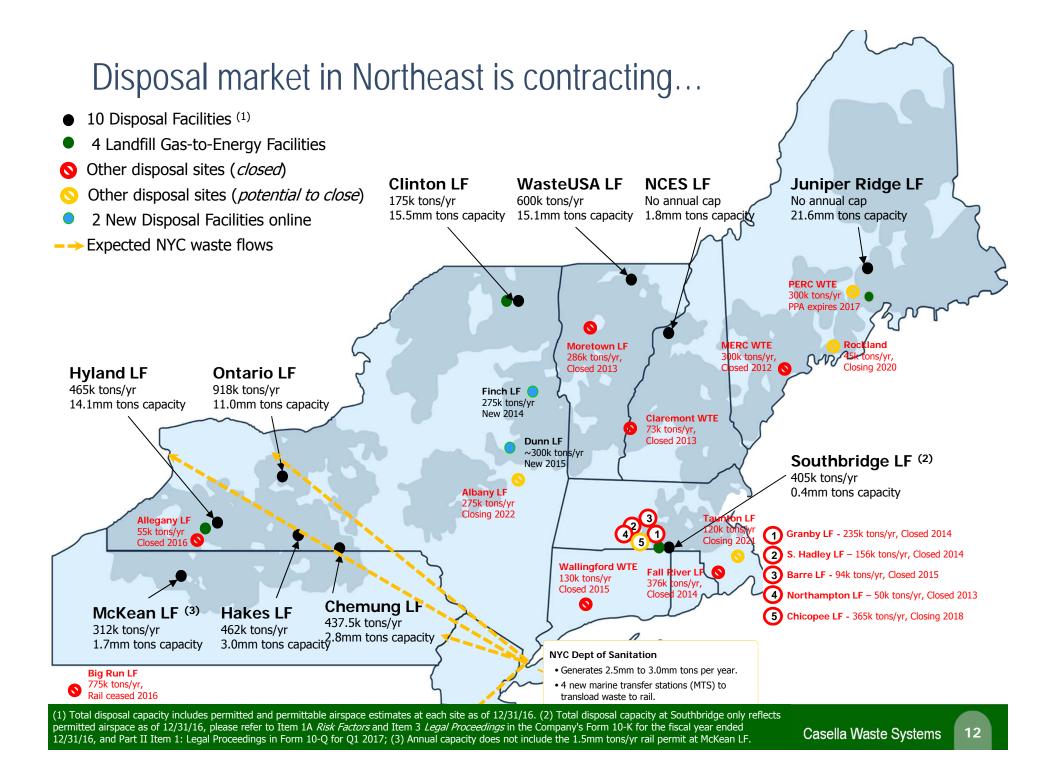


Strategy capitalizes on improving market and asset positioning to further improve landfill returns.

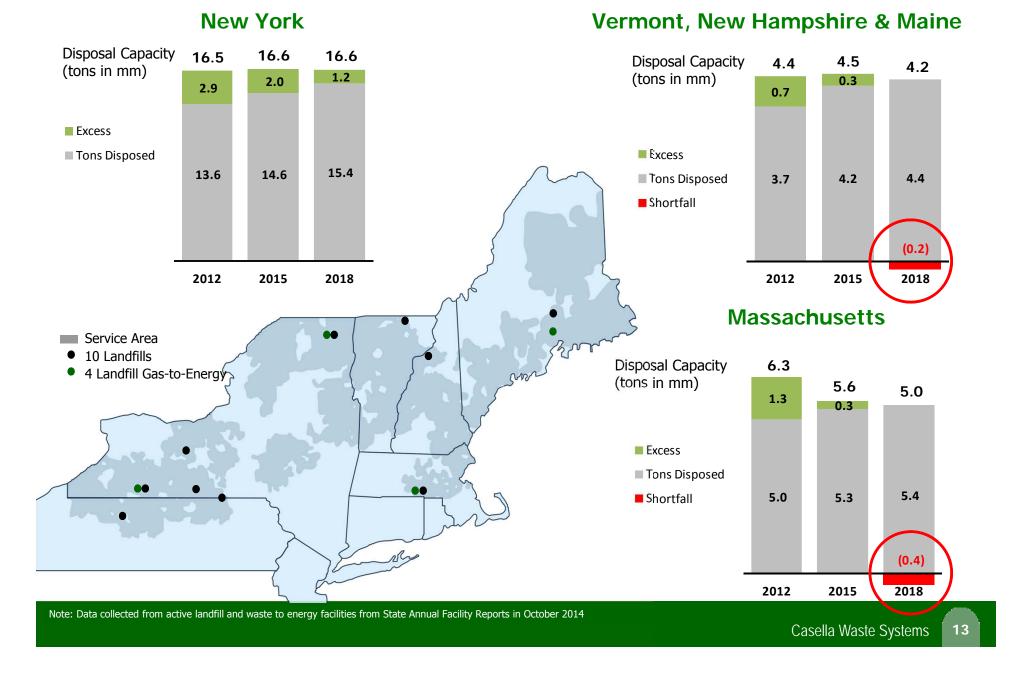
- Eastern Region focus on pricing; capacity constraints provide tailwind. Goal to increase pricing +350bps/yr in excess of inflation through CYE 2018.
- Western Region began to shift strategy in late CYE 2016 to focus on pricing versus higher volumes.

Market dynamics are improving across our footprint area.

- Disposal site closures (and expected closures) are creating a supply-demand imbalance.
- Within our footprint, roughly 1.7mm tons/yr of disposal capacity has closed since Dec 2012, and an additional 1.2mm tons/yr of disposal capacity is expected to permanently close in the next couple years, offset by 0.4mm tons/yr of new disposal capacity (= net closure of 2.6mm tons/yr).
- NYC Dept. of Sanitation marine transfer stations expected to shift roughly +1.0mm tons/yr of additional waste to competitor landfills in upstate NY (reducing excess capacity in market).



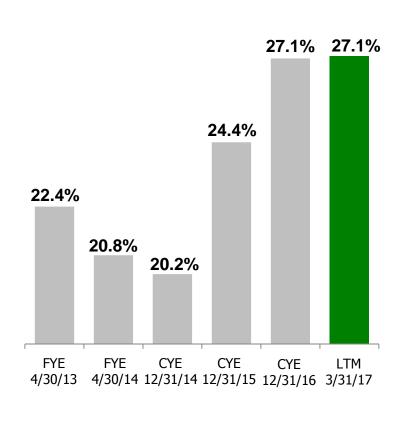
... creating a supply-demand imbalance





Driving additional profitability in collection operations

Collection Adjusted EBITDA Margins

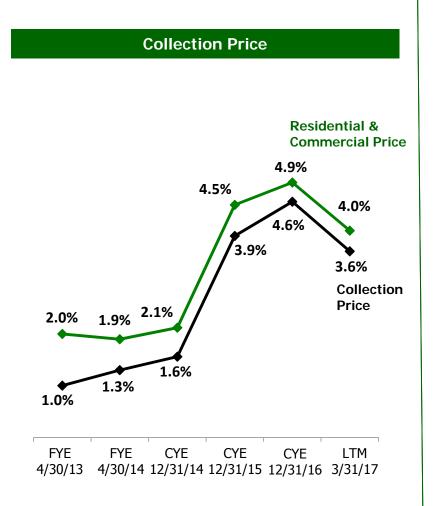


Strategies to improve Collection margins by +80 to +120bps/yr through CY2018:

- 1) Pricing over inflation;
- 2) Operating efficiencies; and
- 3) Selling or swapping under-performing routes or operations.



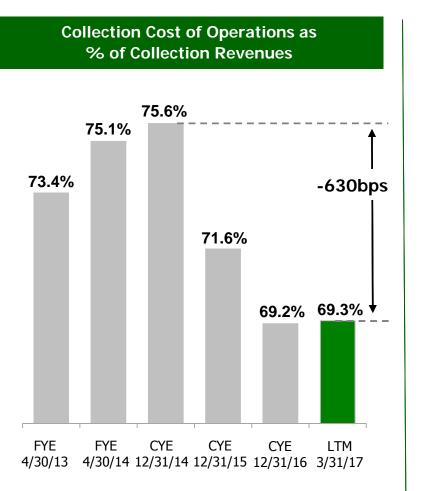
Driving additional profitability in collection operations - continued



(1) Focus on pricing discipline.

- Residential and commercial pricing <u>up +4.0% YOY in LTM 3/31/17.</u>
- Centralized pricing strategy with a decentralized sales model focused on pricing execution and quality of revenues.
- Launched an Sustainability Recycling Adjustment ("SRA") fee in Q2 2015 to offset lower recycling commodity values.
- The roll-off market is experiencing positive trends with pricing up +2.3% LTM 3/31/17.

2



(2) Focus on operating efficiencies.

- Cost of Operations as a % of revenues <u>down -630bps since CYE 12/31/14</u>.
- Route profitability improving routing efficiency with new routing tools, on-route marketing for improved route density, and equipment choices.
- Fleet optimization implementing fleet plan to standardize fleet selection, reducing maintenance costs, reducing spare ratios, and solving lingering fleet issues.
- Reducing volatility by locking in roughly 38% of fuel at fixed forward prices.

(3) Focus on selling or swapping under-performing routes.

• Continuous review of opportunities.



Zero-Sort® Recycling

- Casella operates 6 Zero-Sort MRFs in our integrated footprint.
- Mature facilities operating at ~95% of capacity.
- Recycling Adjusted EBITDA margins at 22.8% in Q1 2017 (up +1400bps YOY).
- Reshaping business to reduce commodity risk and improve returns through: higher tipping fees, the SRA fee (implementation completed in Q1 2016; annual run-rate of ~\$5.0mm), operating efficiencies, and contract resets.

Customer Solutions

- Services for Industrial, Municipal, Institutional, and multi-location Retail customers.
- Growth opportunities in the industrial service offerings (lower margins with high FCF).

Casella Organics

- Business focused on transforming Biosolids into renewable products for fertilization.
- Northeast biosolids market is rapidly becoming capacity constrained due to facility closures and regulatory changes.



Focused over last 4 years on reducing risk, improving the balance sheet, and increasing free cash flow:

- Dec 2012 sold Maine Energy for \$6.7mm; eliminated negative cash flow operation.⁽¹⁾
- July 2013 sold BioFuels for \$2.0mm; eliminated negative cash flow operation.
- Dec 2013 sold 50% stake in US GreenFiber resulting in \$3.4mm net cash proceeds; eliminated non-integrated, negative cash flow operation.⁽²⁾
- Dec 2014 completed site remediation and closure at three sites.
- Mar 2015 sold CARES assets and wholly-owned assets/real estate for \$3.1mm net cash proceeds; eliminated non-integrated, negative cash flow operation.
- Jun 2015 sold low-margin hauling routes for \$0.9mm in total proceeds.
- Sep 2015 to July 2016 repurchased and permanently retired \$39.4mm of 7.75% Senior Subordinated Notes.
- Oct 2016 refinanced 7.75% Senior Subordinated Notes and ABL Revolver, saving \$11.0mm per year of cash interest.
- April 2017 repriced \$350mm Term Loan B, saving \$0.9mm per year of cash interest.

October 2016 refinancing drives lower cash interest costs

Refinanced 7.75% Senior Subordinated Notes due Feb 2019 and ABL Revolver due Mar 2020 with the following:

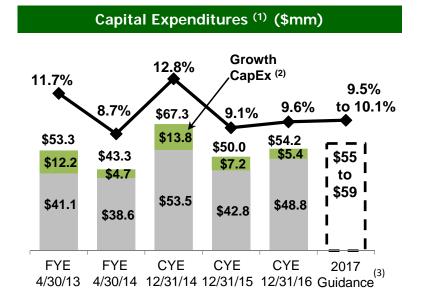
- \$160.0mm Revolving Credit Facility 5-year term, interest rate initially set at LIBOR+300bps.⁽¹⁾
- \$350.0mm Term Loan B 7-year term, priced at 99.50% of principal amount, interest rate initially set at LIBOR+300bps (with a 1.00% LIBOR floor), adjusted to LIBOR+275bps upon achieving a consolidated net leverage ratio ≤ 3.75x.
- Transaction closed on Oct 17, 2016.

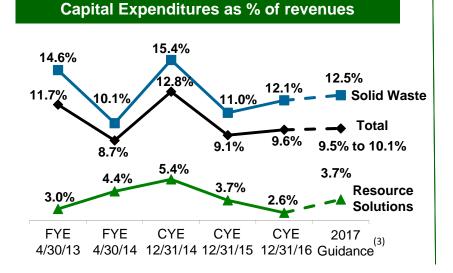
Refinancing achieved the following benefits:

- Reduced cash interest costs by roughly \$11.0 million per year;
- Extended debt maturities 5 to 7 years;
- Term Loan B pre-payable at Par, enabling further debt repayment; and
- Increased financial flexibility.

 The interest rate on the Revolving Credit Facility is adjusted based on Consolidated Net Leverage Ratio from LIBOR+250bps to +325bps.

Focus on capital discipline driving down capital expenditures





Disciplined capital strategy driving down capital expenditures.

- Hurdle rates increased to reduce risk and improve return on invested capital.
- Capital expenditures also down due to the sale/closure of under-performing assets.

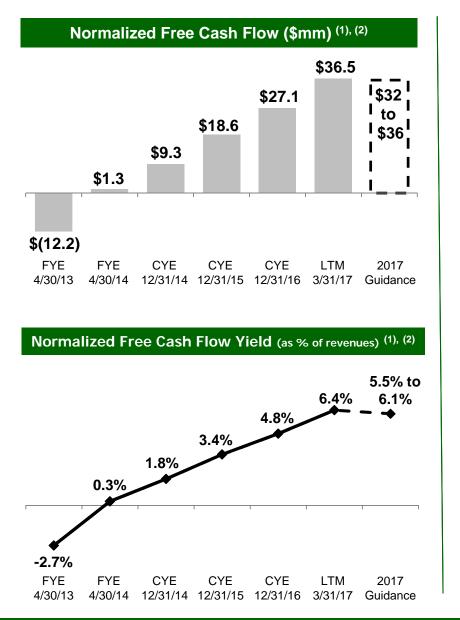
Capital expenditures estimated at 9.5% to 10.1% of CY 2017 revenues.

- 73% revenues in integrated Solid Waste and 27% in Resource Solutions (Recycling, Organics, Customer Solutions, and other).
- Solid Waste CapEx at 12.1% as a % of revenues for CY 2016.
- Resource Solutions CapEx at 2.6% as a % of revenues for CY 2016.

- (2) Growth capital expenditures as defined in the Appendix.
- (3) CY 2017 Guidance as announced on 3/1/17.

⁽¹⁾ Excludes acquisition capital expenditures.

Strategic execution driving higher Free Cash Flows



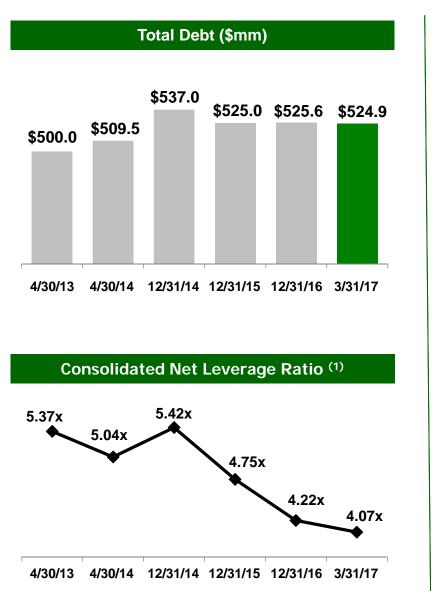
Focused on improving Free Cash Flow:

- Normalized FCF <u>+\$36.5mm LTM 3/31/17</u>.
- Strategic actions taken since Dec 2012 have reduced risk and improved free cash flows.
- Plan to use excess cash to repay high cost debt, along with select strategic tuck-in acquisitions or investments.
- Driving higher Free Cash Flow through operating cash flows, lower interest costs, and maintaining strict capital discipline.
- Tax loss carryforwards will help to accelerate delevering (as of 12/31/16, \$106.9mm of Federal NOLs and tax credits).⁽³⁾

- (2) CY 2017 Guidance as announced on 3/1/17, and reaffirmed on 5/4/17.
- (3) Total tax carryforwards include \$98.7mm of Federal NOLs and \$8.2mm of Federal tax credits; total tax carry forwards exclude \$110.5mm of State NOLs.

⁽¹⁾ See attached appendix for further information and for a reconciliation of Free Cash Flow and Normalized Free Cash Flow to net cash provided by operating activities, which is the most directly comparable GAAP measure. Net cash provided by operating activities for the periods presented above was \$43.9mm for FYE 4/30/13, \$49.6mm for FYE 4/30/14, \$62.2mm for CYE 12/31/14, \$70.5mm for CYE 12/31/15, \$80.4mm for CYE 12/31/16, and \$89.4mm for LTM 3/31/17.

Utilizing Free Cash Flow primarily to repay debt



Capital strategy continues to focus on reducing leverage and debt reduction.

Reduced leverage by -1.35x and paid down \$12.1mm of debt since 12/31/14.⁽¹⁾

- Completed the refinancing of our ABL Facility and 7.75% Senior Subordinated Notes with a new \$160.0mm Revolver and \$350.0mm Term Loan B on October 17, 2016. Saves \$11.0mm/yr of cash interest.
- Repriced \$350.0mm Term Loan B on April 17, 2017. Saves \$0.9mm/yr of cash interest.

Targeting Consolidated Net Leverage Ratio of 3.25x to 3.75x in CYE 2018.

Defined as "Consolidated Net Leverage Ratio" in the our Credit Agreement dated as of 10/17/16 ("ABL Revolver") for 12/31/16 and 3/31/17; Total Debt-to-EBITDA as defined as "Consolidated Leverage Ratio" in the our Loan & Security Agreement dated as of 2/27/15 ("ABL Revolver") for all other periods; see appendix for a reconciliation.

Casella's value drivers...

Valuable integrated solid waste assets in disposal limited Northeast markets.

Management focused on increasing Free Cash Flow and reducing debt leverage.

Results demonstrate strong execution of plan.

Near term focus of team:

- Improving landfill returns;
- Driving profitability of collection operations;
- Creating value through Resource Solutions;
- Improving balance sheet & reducing risk.





Reconciliation of Adjusted EBITDA

	£	Fiscal Year ended April 30,			months ended ec. 31, 2014	12 months ended Dec. 31, 2015		12 months ended Dec. 31, 2016		12 months ended Mar. 31, 2017	
	2013		2014			200101/2010					
Revenue	\$ 455,33	5\$	6 497,633	\$	525,938	\$ 546,5	00	\$	565,030	\$ 573,400	
Net (loss) income	\$ (54,46	53) \$	(27,404)	\$	(29,136)	\$ (11,	781)	\$	(6,858)	\$ 532	
Loss on disposal of discontinued operations, net		-	378		-		-		-	-	
Loss (income) from discontinued operations, net	4,48	30	(284)		-		-		-	-	
Provision for income taxes	(2,52	26)	1,799		1,340	1,	351		494	659	
Other income	(1,03	36)	(1,059)		(1,177)	(1,	119)		(1,090)	(1,030)	
Loss on derivative instruments	4,51	2	280		575		227		-	-	
Loss from equity method investments	4,44	11	936		(90)		-		-	-	
Loss on sale of equity method investment		-	(593)		221		-		-	-	
Impairment of investments		-	-		2,320	2,	099		-	-	
Loss on debt extinguishment	15,58	34	-		-		999		13,747	14,267	
Interest expense, net	41,42	29	37,863		38,082	40,	090		38,652	35,107	
Gain on settlement of acquisition related contingent consideration		-	(1,058)		(1,058)		-		-	-	
Expense from divestiture, acquisition and financing costs	1,41	0	144		24		-		-	-	
Severance and reorganization costs	3,70)9	586		426		302		-	-	
Environmental remediation charge		-	400		950		-		900	900	
Development project charge		-	1,394		1,394		-		-	-	
Divestiture transactions		-	7,455		6,902	(5,	517)		-	-	
Contract settlement charge		-	-		-	1,	940		-	-	
Depreciation and amortization	56,57	<i>'</i> 6	60,339		61,206	62,	704		61,856	61,252	
Fiscal year-end transition costs		-	-		538		-		-	· -	
Proxy contest costs		-	-		-	1,	902		-	-	
Depletion of landfill operating lease obligations	9,37	2	9,948		10,725	9,	428		9,295	9,109	
Interest accretion on landfill and environmental remediation liabilities	3,67	/5	3,985		3,606	3,	449		3,606	3,685	
Adjusted EBITDA	\$ 87,84	2 \$	<u>95,109</u>	\$	96,848	<u>\$ 106,0</u>	074	\$	120,602	\$ 124,480	
Solid Waste	80,82	04	89,720		92,346	QQ	086		108,982	110,159	
Recycling segment	3,76		1,913		2,609		080 074		6,754	9,323	
Other segment	3,25		3,476		1,893		914		4,866	4,998	
Adjusted EBITDA	\$ 87,84		5,470 5 95,109	\$	96,848	\$ 106,0		\$	120,602	\$ 124,480	
-		_		<u> </u>			_	<u> </u>			
Adjusted EBITDA Margin (%)	19.3	%	19.1%		18.4%	19	.4%		21.3%	21.7%	

(1) We present Adjusted EBITDA, a non-GAAP measure, because we consider it an important supplemental measure of our performance and believe it is frequently used by securities analysts, investors and other interested parties in the evaluation of our results. Management uses Adjusted EBITDA to further understand our "core operating performance." We believe our "core operating performance" is helpful in understanding our ongoing performance in the ordinary course of operations. We believe that providing Adjusted EBITDA to investors, in addition to the corresponding income statement measures, affords investors the benefit of viewing our performance using the same financial metrics that the management team uses in making many key decisions and understanding how the core business and our results of operations have performed. We further believe that providing this information allows our investors greater transparency and a better understanding of our core financial performance. In addition, the instruments governing our indebtedness use EBITDA (with additional adjustments) to measure our compliance with covenants.

Reconciliation of Free Cash Flow and Normalized Free Cash Flow

Non-GAAP Reconciliation of Free Cash Flow and Normalized Free Cash Flow to Net Cash Provided by Operating Activities (1)

	Fisc	Fiscal Yea April				months ended	12 months ended Dec. 31, 2015		12 months ended Dec. 31, 2016		12 months ended Mar. 31, 2017	
	2013	2013		014	Dec. 31, 2014							
Net Cash Provided By Operating Activities	\$ 43,9	906	\$ 4	49,642	\$	62,158	\$	70,507	\$	80,434	\$	89,386
Capital expenditures (net of acquisition) Payments on landfill operating lease contracts Proceeds from sale of property and equipment Proceeds from divestiture transactions	(6,	,281) ,261) 883 -		(43,326) (6,505) 1,524 -		(67,252) (5,440) 815		(49,995) (5,385) 715 5,335		(54,200) (7,249) 1,362		(52,986 (7,726 1,087
Proceeds from property insurance settlement Contributions from (distribution to) noncontrolling interest holders	2,	- ,531		-		-		546 (1,495)		-		
Free Cash Flow	<u>\$ (12,2</u>	<u>222</u>)	\$	1,335	\$	(9,719)	\$	20,228	\$	20,347	\$	29,76 1
Landfill closure, site improvement and remediation expenditures (i) New contract and project capital expenditures (ii) Cash proceeds, net from CARES dissolution (iii)						7,494 11,528 -		1,447 - (3,055)		- - - 6 770		- - - 6,770
Interest payment on redemption of senior subordinated notes (iiii)						-	*	-		6,770	*	
Normalized Free Cash Flow					\$	9,303	\$	18,620	\$	27,117	\$	36,53

(i) Includes cash outlays associated with the following identified items: Worcester landfill capping, BioFuels site improvement, and Maine Energy decommissioning, demolition and site remediation.

(ii) Includes cash outlays related to capital investments associated with certain new contracts and projects, including: the Thiopaq gas treatment system, the Lewiston, ME Zero-Sort material recovery facility, the Rockland, NY material recovery facility, the Concord, NH waste services contract, the City of Boston, MA recycling contract, and the Brookline, MA, Otsego, NY, Tompkins, NY and Schoharie, NY transfer stations.

(iii) Includes cash proceeds and cash distribution associated with the dissolution of CARES.

(iiii) Includes interest payment required upon redemption of the senior subordinated notes.

(1) We present Free Cash Flow, a non-GAAP measure, because we consider it an important supplemental measure of our performance and believe it is frequently used by securities analysts, investors and other interested parties in the evaluation of our results. Management uses Free Cash Flow and Normalized Free Cash Flow to further understand our "core operating performance." We believe our "core operating performance" is helpful in understanding our ongoing performance in the ordinary course of operations. We believe that providing Free Cash Flow and Normalized Free Cash Flow to investors, in addition to the corresponding cash flow statement measures, affords investors the benefit of viewing our performance using the same financial metrics that the management team uses in making many key decisions and understanding how the core business and our results of operations have performed. We further believe that providing this information allows our investors greater transparency and a better understanding of our core financial performance.

Reconciliation of Consolidated Leverage Ratio

Reconciliation of Consolidated EBITDA (as defined by the applicable credit facility agreement) to Net Cash Provided by Operating Activities (1)

(S in millions)	Fiscal Year ended April 30,					2 months ended Dec. 31, 2014	12 months ended Dec. 31, 2015	12 months ended Dec. 31, 2016	12 months ended Mar. 31, 2017	
	2	2013	13 2014		Dec. 31, 2014		Dec. 31, 2015	Dec. 31, 2016	War. 31, 2017	
Net Cash Provided By Operating Activities	\$	43.9	\$	49.6	\$	62.2	\$ 70.5	\$ 80.4	4 \$ 89.4	
Changes in assets and liabilities, net of effects of acquisitions and divestitures		(0.6)		9.2		(2.2)	(5.0)	9.	4 7.6	
Divestiture transactions		-		(7.5)		(6.9)	5.5			
Gain on sale of property and equipment		0.4		0.8		0.5	0.1	0.	6 0.5	
Loss on debt extinguishment		(15.6)		-		-	(1.0)	(13.	7) (14.3)	
Stock based compensation and related severance expense, net of excess tax benefit		(2.4)		(2.4)		(2.3)	(2.9)	(3.	4) (3.9	
Development project charge		-		(1.4)		(1.4)	-			
Impairment of investments		-		-		(2.3)	(2.1)			
Loss on derivative instruments		(4.5)		(0.3)		(0.6)	(0.2)			
Interest expense, less amortization of debt issuance costs and discount on long-term debt		40.9		37.9		38.2	40.1	35.	1 31.9	
Provision for income taxes, net of deferred taxes		1.0		0.2		0.2	0.6	(0.	1) 0.3	
Gain on settlement of acquisition related contingent consideration		-		1.1		1.1	-			
Environmental remediation charge		-		-		-	-	(0.	9) (0.9	
EBITDA adjustment as allowed by the applicable credit facility agreement		2.8		9.3		7.5	(2.5)		- 0.3	
Other adjustments as allowed by the applicable credit facility agreement		27.1		4.0		5.3	7.4	17.	1 17.9	
Minimum Consolidated EBITDA	\$	93.0	\$	101.1	\$	99.1	\$ 110.5	<u>\$ 124.</u>	5 \$ 128.8	
Consolidated Funded Debt (Total Debt)	\$	500.0	\$	509.5	\$	537.0	\$ 525.0	\$ 525.	0 \$ 524.6	
Consolidated Leverage Ratio (Total Debt-to-EBITDA)		5.37		5.04		5.42	4.75	4.2	2 4.07	

(1) The amortization of debt issuance costs is included as a component of changes in assets and liabilities, net of effects of acquisitions and divestitures and has not been conformed to the 12-months ended June 30, 2016 presentation of interest expense, less the amortization of debt issuance costs and the discount on long-term debt.

Capital Expenditure Detail

Capital Expenditure Detail (1)

(\$ in thousands)	Fiscal Yea April	ed		onths ended 31,2014		onths ended . 31, 2015	12 months ended Dec. 31, 2016		
	2013	2014	Dec	31, 2014	Dec	. 31, 2015	Dec	. 31, 2010	
Total Growth Capital Expenditures	\$ 12,192	\$ 4,664	\$	13,789	\$	7,244	\$	5,373	
Replacement Capital Expenditures:									
Landfill development	29,617	24,019		23,216		18,828		29,666	
Vehicles, machinery / equipment and containers	8,552	10,465		25,102		18,866		15,512	
Facilities	2,254	3,170		3,605		2,873		2,581	
Other	 666	 1,008		1,540		2,184		1,068	
Total Replacement Capital Expenditures	 41,089	 38,662		53,463	_	42,751		48,827	
Total Capital Expenditures	\$ 53,281	\$ 43,326	\$	67,252	\$	49,995	\$	54,200	
Capital Expenditures as % of Revenues	11.7%	8.7%		12.8%		9.1%		9.6%	

(1) Our capital expenditures are broadly defined as pertaining to either growth, replacement or acquisition activities. Growth capital expenditures are defined as costs related to development of new airspace, permit expansions, and new recycling contracts along with incremental costs of equipment and infrastructure added to further such activities. Growth capital expenditures include the cost of equipment added directly as a result of organic business growth as well as expenditures associated with adding infrastructure to increase throughput at transfer stations and recycling facilities. Replacement capital expenditures are defined as landfill cell construction costs not related to expansion airspace, costs for normal permit renewals, and replacement costs for equipment due to age or obsolescence. Acquisition capital expenditures, which are not included in the table above, are defined as costs of equipment added directly as a result of new business growth related to an acquisition.