HARSCO

Investor Presentation

November 2019

SAFE HARBOR STATEMENT

This presentation does not constitute an offer to sell, or a solicitation of an offer to buy, any security and shall not constitute an offer, solicitation or sale in any jurisdiction in which such offer, solicitation or sale would be unlawful.

Forward-Looking Statements

The Company's presentation contains forward-looking statements based on management's current expectations, estimates and projections. The nature of the Company's business and the many countries in which it operates subject it to changing economic, competitive, regulatory and technological conditions, risks and uncertainties. In accordance with the "safe harbor" provisions of Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934, the Company provides the following cautionary remarks regarding important factors that, among others, could cause future results to differ materially from the results contemplated by forward-looking statements, including the expectations and assumptions expressed or implied herein. Forward-looking statements contained herein could include, among other things, statements about management's confidence in and strategies for performance; expectations for new and existing products, technologies and opportunities; and expectations regarding growth, sales, cash flows, and earnings. Forward-looking statements can be identified by the use of such terms as "may," "could," "expect," "anticipate," "intend," "believe," "likely," "estimate," "outlook," "plan" or other comparable terms.

Factors that could cause actual results to differ, perhaps materially, from those implied by forward-looking statements include, but are not limited to: (1) changes in the worldwide business environment in which the Company operates, including general economic conditions; (2) changes in currency exchange rates, interest rates, commodity and fuel costs and capital costs; (3) changes in the performance of equity and bond markets that could affect, among other things, the valuation of the assets in the Company's pension plans and the accounting for pension assets, liabilities and expenses; (4) changes in governmental laws and regulations, including environmental, occupational health and safety, tax and import tariff standards and amounts; (5) market and competitive changes, including pricing pressures, market demand and acceptance for new products, services and technologies; (6) the Company's inability or failure to protect its intellectual property rights from infringement in one or more of the many countries in which the Company operates; (7) failure to effectively prevent, detect or recover from breaches in the Company's cybersecurity infrastructure; (8) unforeseen business disruptions in one or more of the many countries in which the Company operates due to political instability, civil disobedience, armed hostilities, public health issues or other calamities; (9) disruptions associated with labor disputes and increased operating costs associated with union organization; (10) the seasonal nature of the Company's business; (11) the Company's ability to successfully enter into new contracts and complete new acquisitions or strategic ventures in the time-frame contemplated, or at all; (12) the integration of the Company's strategic acquisitions; (13) potential severe volatility in the capital markets; (14) failure to retain key management and employees; (15) the amount and timing of repurchases of the Company's common stock, if any; (16) the outcome of any disputes with customers, contractors and subcontractors; (17) the financial condition of the Company's customers, including the ability of customers (especially those that may be highly leveraged and those with inadequate liquidity) to maintain their credit availability; (18) implementation of environmental remediation matters; (19) risk and uncertainty associated with intangible assets; and (20) other risk factors listed from time to time in the Company's SEC reports. A further discussion of these, along with other potential risk factors, can be found in Part I, Item 1A, "Risk Factors," of the Company's Annual Report on Form 10-K for the year ended December 31, 2018, together with those described in Item 1A, "Risk Factors," of the Company's Quarterly Report on Form 10-Q for the period ended June 30, 2019. The Company cautions that these factors may not be exhaustive and that many of these factors are beyond the Company's ability to control or predict. Accordingly, forward-looking statements should not be relied upon as a prediction of actual results. The Company undertakes no duty to update forward-looking statements except as may be required by law.

Explanatory Note Regarding Estimates

This presentation includes certain estimates. These estimates reflect management's best estimates based upon currently available information and certain assumptions we believe to be reasonable. These estimates are inherently uncertain, subject to risks and uncertainties, many of which are not within our control, have not been reviewed by our independent auditors and may be revised as a result of management's further review. In addition, these estimates are not a comprehensive statement of our financial results, and our actual results may differ materially from these estimates due to developments that may arise between now and the time the results are final. There can be no assurance that the estimates will be realized, and our results may vary significantly from the estimates, including as a result of unexpected issues in our business and operations. Accordingly, you should not place undue reliance on such information. See "Forward-Looking Statements".

Non-GAAP Measures

Throughout this presentation, the Company refers to certain non-GAAP measures, including without limitation, adjusted EBITDA, adjusted operating income (loss) from continuing operations, adjusted operating income including discontinued operations, adjusted operating income before acquisition amortization expense and including discontinued operations, adjusted operating income margin, adjusted diluted earnings per share from continuing operations, adjusted diluted earnings per share including discontinued operations, adjusted diluted earnings per share before acquisition amortization expense and including discontinued operations, adjusted return on invested capital, free cash flow and free cash flow before growth capital expenditures. For a reconciliation of non-GAAP measures to U.S. GAAP results and the Company's rationale for its usage of non-GAAP measures, see the Appendix in this presentation.

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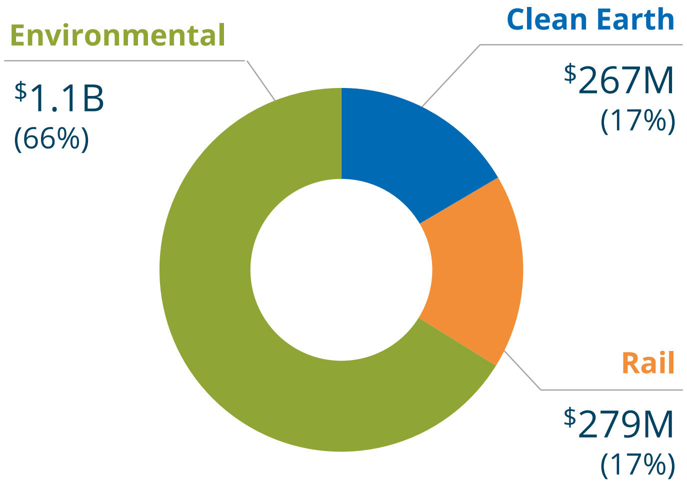
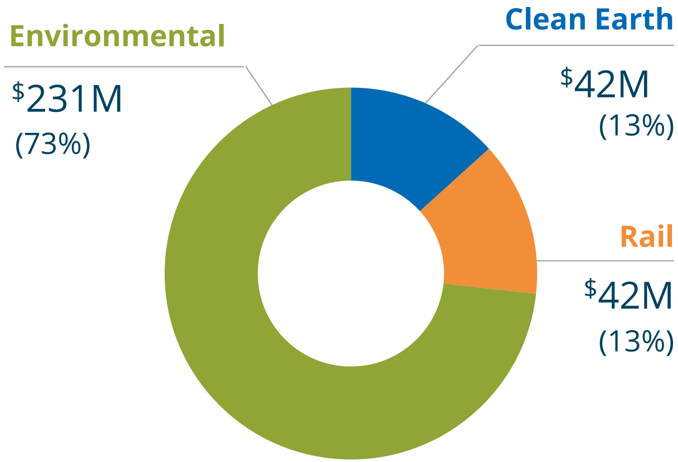
HARSCO TODAY

- Market leading provider of environmental solutions for industrial and specialty waste streams and innovative technologies, serving industries that are fundamental to global growth.
- Recent M&A accelerates Harsco's environmental strategy and transformation to single thesis company, as a leading global provider of environmental solutions
- Strategic shift towards higher-growth and less-cyclical businesses with attractive margins

FY 2018 Revenue (Proforma)[1]



2018 EBITDA (Adjusted, Proforma)[1]



(1) See tables in appendix for Reconciliations. Also percentages don't total due to rounding, and note that Clean Earth EBITDA is not adjusted for synergies or other costs savings.

HISTORICAL PERSPECTIVE

2015 – 2017: BUILT STRONG FOUNDATION

- Harsco Environmental revitalized
- Improved and stabilized Harsco leadership team
- Implemented core business system and developed CI culture
- Strengthened balance sheet and cash flow performance
- Realized meaningful lift in profitability and ROIC

2017 - 2018: PIVOTED TO GROWTH

- Organic growth investments began in Harsco Environmental
- Built-out innovation capabilities and applied products team
- Acquired Altek Group, providing entry into adjacent environmental solutions market

2019: PORTFOLIO TRANSFORMATION

- Purchased Clean Earth, provide entry into additional environmental services market
- Monetized energy business, with plans to sell remaining Industrial assets
- Plans to further build-out environmental service portfolio

ROIC-FOCUSED PORTFOLIO DEVELOPMENT

GROWTH TO OUTPACE SERVED MARKETS

STRATEGY ALIGNED WITH CREATING SHAREHOLDER VALUE

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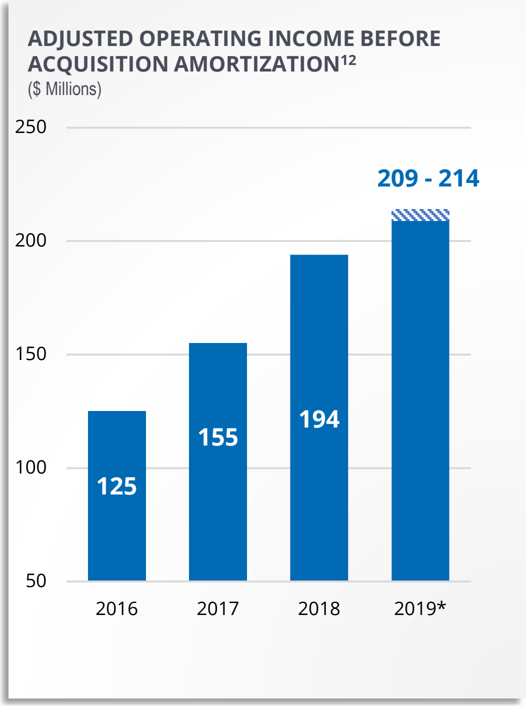
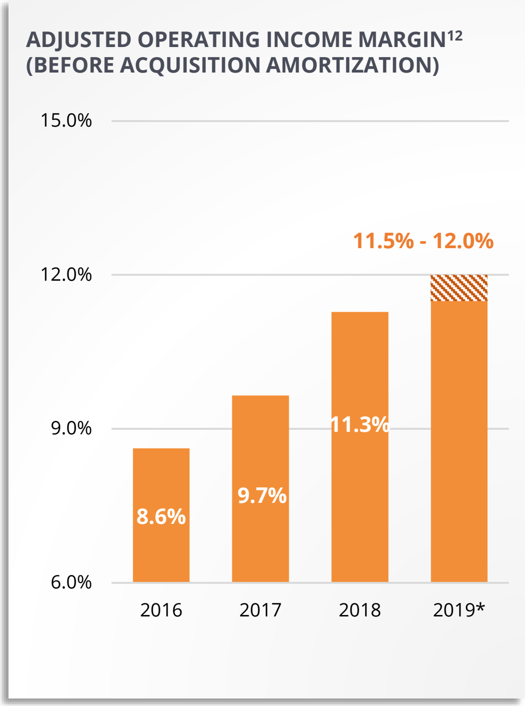
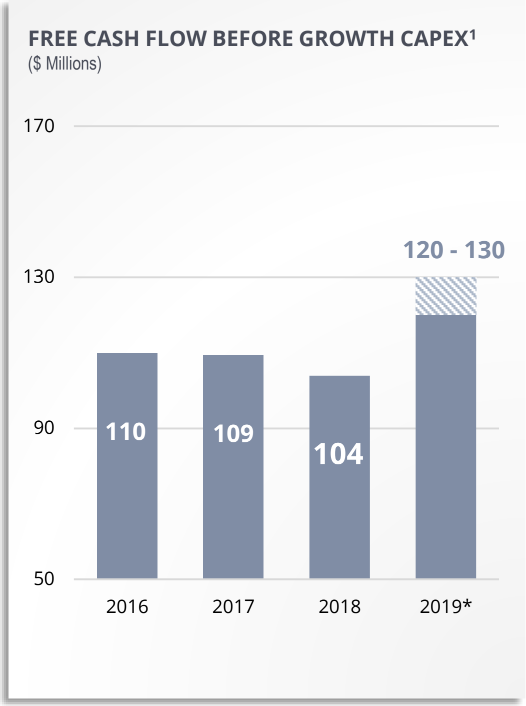
POISED FOR LONG-TERM GROWTH WITH IMPROVING PERFORMANCE







(1) See tables at end of presentation for GAAP to non-GAAP reconciliations.

(2) Includes the results of Industrial for 2016-2018 and 6 months ended June 30, 2019.

* 2019 guidance as reported on 10.29.19

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MAKING A WORLD OF DIFFERENCE™

To our customers, our sites, our communities, our environment, and our people

$1.1B
2018 Revenue

70
Customers

30+
Countries

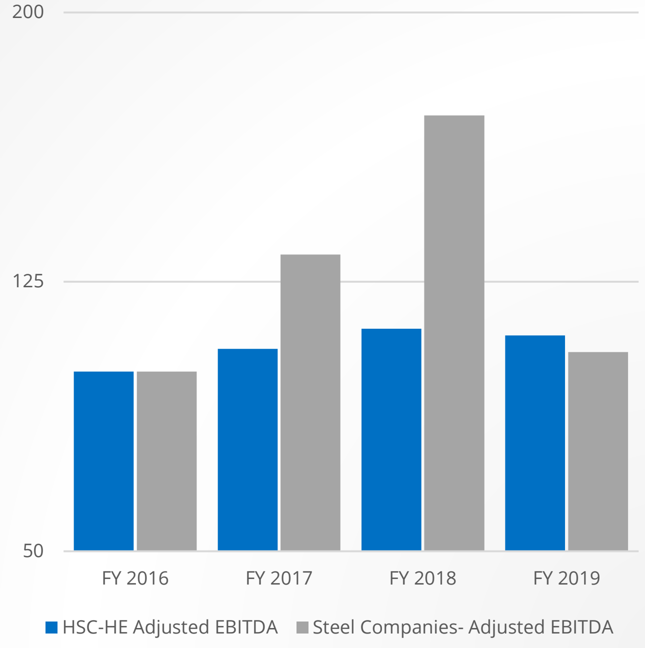
~145
Sites

Serving
30%
of global LST[1]

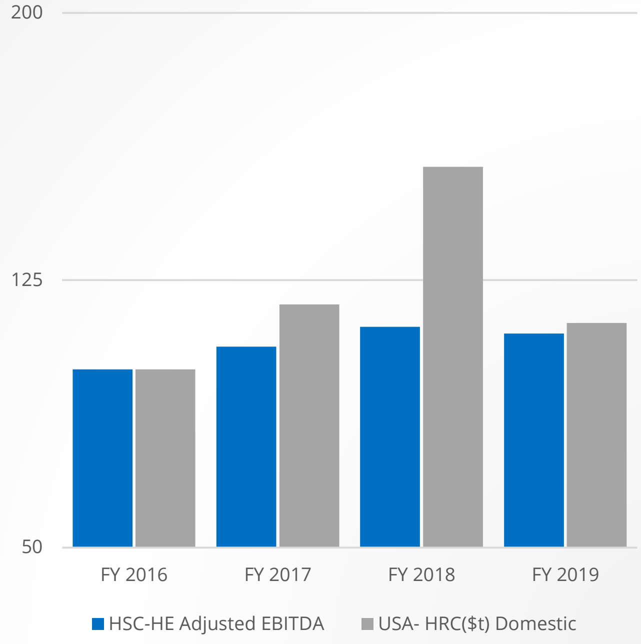
(1) Excludes China, CIS, Iran, Japan, South Korea, Taiwan and Vietnam steel output.

ENVIRONMENTAL SEGMENT – STEADY GROWTH AND LIMITED VOLATILITY

HARSCO ENVIRONMENTAL VS STEEL PRODUCERS – ADJUSTED EBITDA, ANNUAL, INDEXED (%)



HARSCO ENVIRONMENTAL ADJUSTED EBITDA TO US HRC PRICE ($/T), ANNUAL, INDEXED (%)



* Steel producers considered are ArcelorMittal, Gerdau, U.S. Steel and Nucor. EBITDA information provided by Refinitiv and represents consensus data. Also, note that there is no uniform definition of Adjusted EBITDA. Each company defines Adjusted EBITDA differently and, as a result, Adjusted EBITDA of one company may include, or exclude, specific items that are classified differently by other companies.

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HARSCO ENVIRONMENTAL – A GLOBAL MARKET LEADER

Transformation Initiatives
SIGNIFICANTLY IMPROVED
Return Profile

VALUE DRIVERS

- Critical services for metal production and environmental solutions that create value from waste
- Differentiated operational expertise and technology
- Cost savings benefits to customers
- Long-term contracts and multi-decade relationships
- High renewal rates with fixed / variable pricing
- Diversity of customers, geographies and end markets

RESOURCE RECOVERY

MATERIALS MANAGEMENT & SERVICES

ENVIRONMENTAL & (ZERO WASTE) PRODUCT SOLUTIONS

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HARSCO ENVIRONMENTAL – APPLIED PRODUCTS

ADVANCED MATERIAL TECHNOLOGIES DELIVERING ZERO WASTE SOLUTIONS

20%

OF ENVIRONMENTAL'S REVENUES

ATTRACTIVE MARGIN PROFILE

ABRASIVES


FERTILIZER


ASPHALT


ROOFING GRANULES


ROAD CONSTRUCTION


METALLURGICAL ADDITIVES

SOIL CONDITIONER


CEMENT PRODUCTION


SLAG CONDITIONERS

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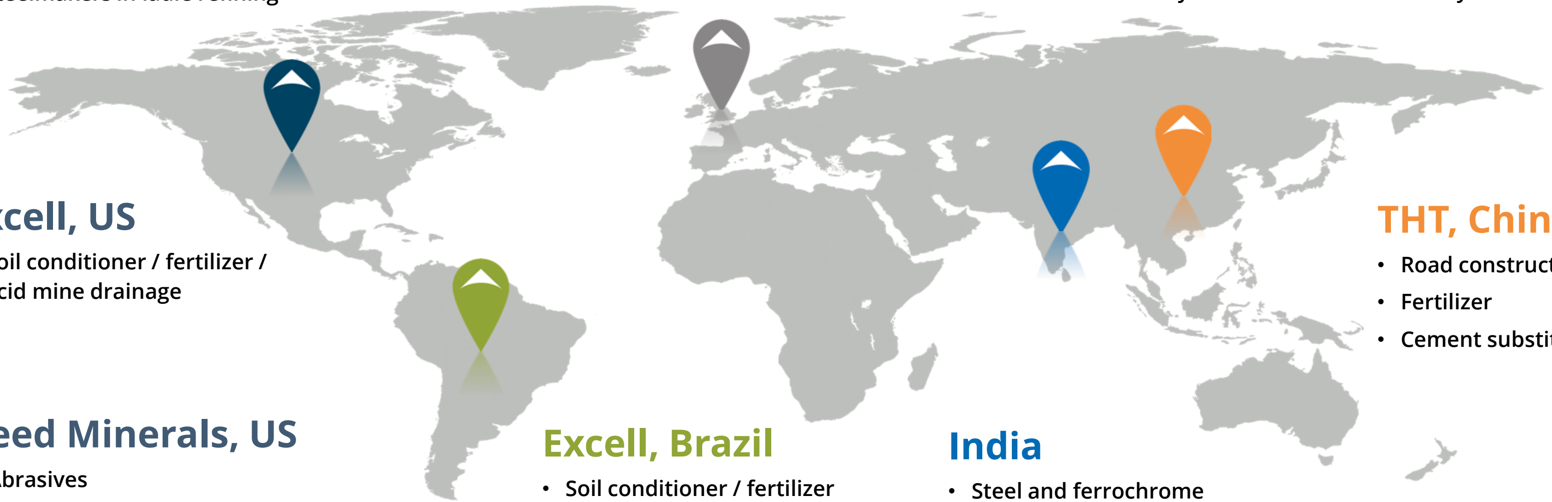
HARSCO ENVIRONMENTAL – APPLIED PRODUCTS

GLOBAL PRESENCE WITH EXPANSION POTENTIAL

Performix, US
- Specialty additives used by steelmakers in ladle refining

Steelphalt, UK
- Asphalt for road construction

ALTEK Group, UK
- Productivity and environmental solutions, mainly for the aluminum industry



Excell, US
- Soil conditioner / fertilizer / acid mine drainage

THT, China
- Road construction
- Fertilizer
- Cement substitute

Reed Minerals, US
- Abrasives
- Roofing granules

Excell, Brazil
- Soil conditioner / fertilizer

India
- Steel and ferrochrome slag based products
- Road construction
- Fertilizer

CLEAN EARTH

Key Facts and Figures[1]

2014 – 2018 Organic Revenue CAGR	7%
2014 – 2018 Total Revenue CAGR	14%
# of Permits	220
# of Permitted Facilities	27
# of Commercial TSDF Sites	6
Beneficial Re-Use of Waste	99%

- High-margin environmental services market with significant regulatory oversight
- Diverse industrial customers with recurring and long-term customer relationships
- Resilient business model, with attractive financial characteristics
- Growth platform (strong organic growth, acquisitions)
- Strong alignment of values and cultures
- Management team with proven track record of financial, environmental and safety performance
- Opportunity for cross-selling with Environmental and for global expansion over time

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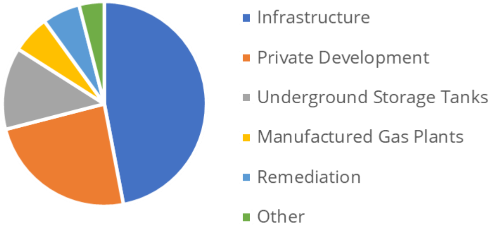
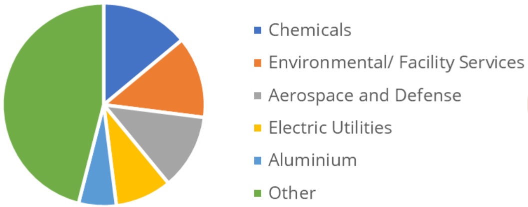
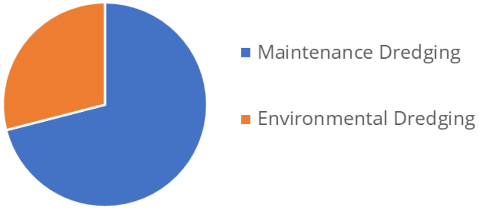
CLEAN EARTH – BUSINESS LINE OVERVIEW

	Contaminated Materials	Hazardous Waste	Dredge
% of Revenue	~50%	~40%	~10%
Description	Treats contaminated soil generated from industrial activities	Provides tracking, testing, processing, recycling, and disposal services for hazardous waste streams	Treats dredge material from both maintenance and environmental-driven projects
Key Industry Exposures			

WASTE STREAMS

 **Contaminated Materials**

 **Industrial Solvents**

 **Haz. & Ind. Wastewater**

 **Aerosols**

 **Household Chemicals**

 **Chemicals / Pesticides**

 **Lab Packs**

 **Mercury Devices**

 **Batteries**

 **Lightbulbs**

 **Clean Fill**

 **Manufactured Gas Plants**

 **Latex Paints**

 **Oncology Drugs**

 **Dredged Material**

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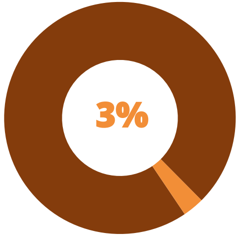
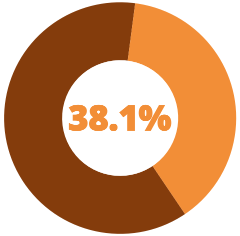
HARSCO RAIL

A CAPITAL-LIGHT BUSINESS WITH HIGH RETURNS



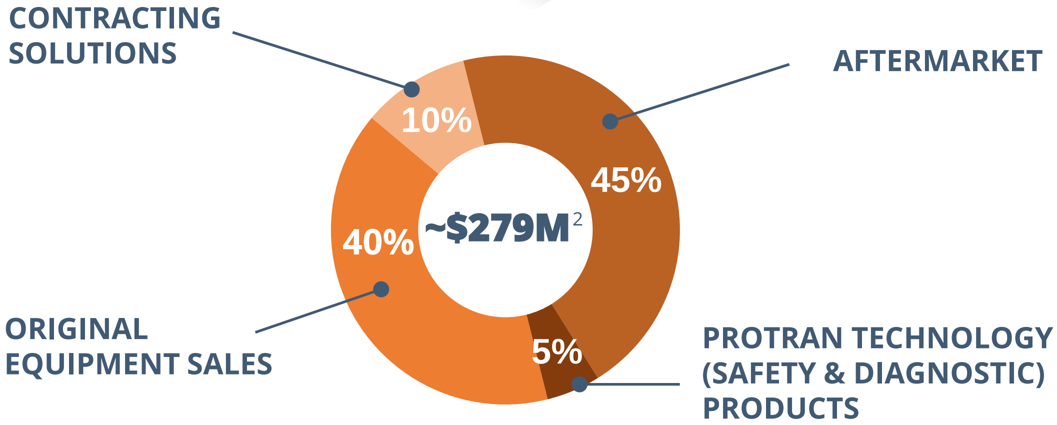
Yearly CapEx
3% of revenue (2018)[1]



ROIC ~ 38.1% (2018)[1]

REVENUE MIX BY BUSINESS

HARSCO RAIL
Enabling TECHNOLOGY IN MOTION



(1) Segment ROIC for 2018 = segment net operating profit after tax (NOPAT) divided by net operating assets.

(2) Revenue breakdown from 2018.

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HARSCO RAIL – LEADER IN NORTH AMERICA RAIL MAINTENANCE EQUIPMENT WITH GROWING PRESENCE IN ASIA & EUROPE

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Enabling TECHNOLOGY IN MOTION

-Original Equipment

-Aftermarket

-Protran Technology Products

-Contracting Solutions

VALUE DRIVERS

- Growing demand for increased safety and track condition awareness
- Large and growing aftermarket opportunity
- Breadth of products and services, that support global infrastructure and rail investments
- Innovative technology and next generation equipment solutions
- Productivity improvements for customers
- Increased rail safety

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DISCIPLINED FINANCIAL STRATEGY

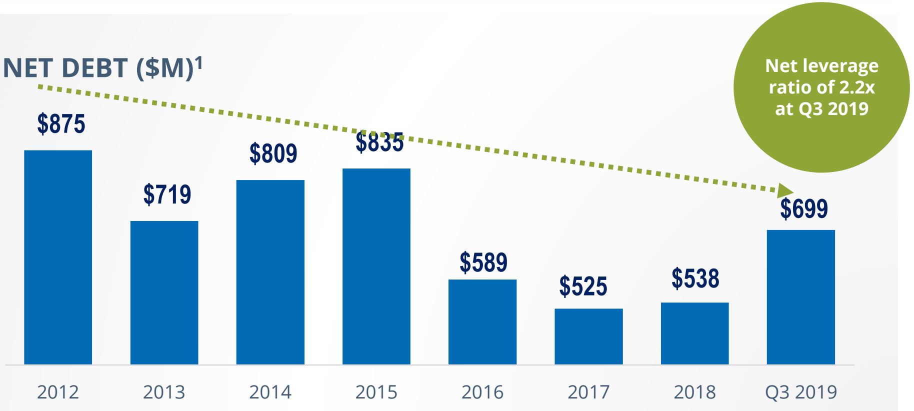
PRINCIPALS

- Maintain efficient capital structure
- Maximize strategic flexibility
- Sustain working capital improvements in each business segment

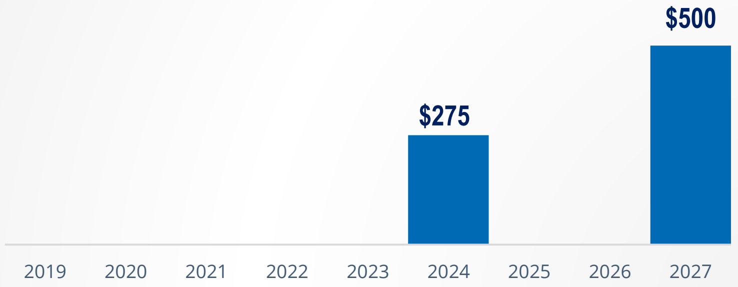
PRIORITIES

- Financially driven capital allocation process
- Return capital to shareholders through $75M share repurchase authorization; $56M utilized through Q3'19
- ROIC > cost of capital
- Long-term leverage ratio: 2.0x – 2.5x

NET DEBT ($M)[1]



MAJOR DEBT MATURITIES - Q2 2019[1]



(1) Net debt equals long term debt + short term borrowing + current maturities of long term debt – cash and cash equivalents. Net leverage ratio calculation in accordance with credit agreement.

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GROWTH OPPORTUNITIES – ENVIRONMENTAL

Considerable White Space at Existing Sites (average less than 5 services per site relative to 40+ service offerings)

Targeted Pursuit of New Sites (large opportunity given unique position in growth markets)

New and Expanded Environmental Product Solutions

(1) Contract wins since 2016

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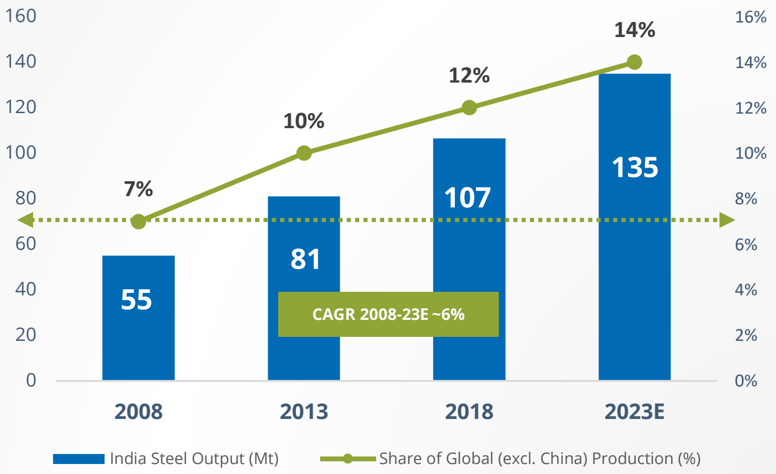
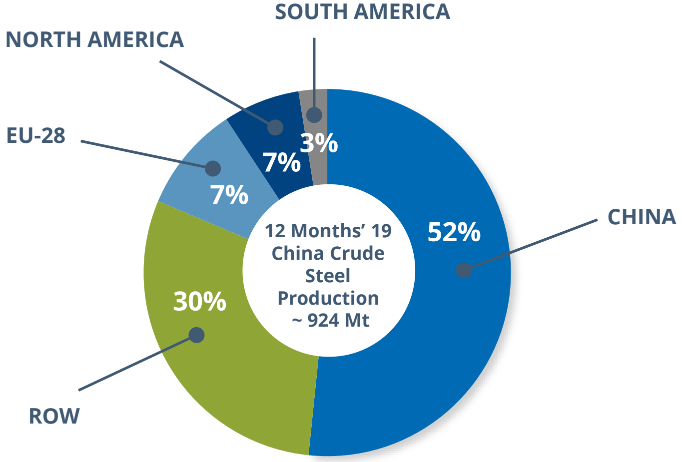
GROWTH OPPORTUNITIES – ENVIRONMENTAL

INDIA STEEL PRODUCTION: ONLY GLOBAL STEEL MILL SERVICES COMPANY WITH FULL-SCALE OPERATIONS IN GROWING INDIAN MARKET



CHINA: SIGNIFICANT OPPORTUNITIES FROM OUTSOURCING STEEL MILL SERVICES



Source: World Steel Association, Oxford economics, World Steel Association , Goldman Sachs, Credit Suisse, Deutsche Bank

GROWTH OPPORTUNITIES – CLEAN EARTH

- Growing list of materials designated as Hazardous and Contaminated
- Continued market penetration through new permits and treatments as well as market expansion
- Permit modifications and expansions
- Geographic expansion
- Increased maintenance and environment dredging in core and new markets
- Large, actionable M&A pipeline

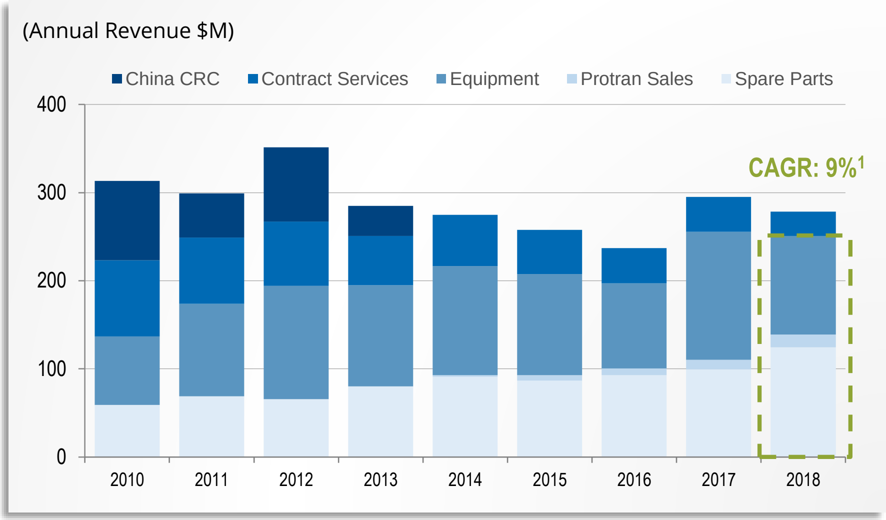
Recent Examples by Business Line

Hazardous Materials	**Permit Modifications:** 220 active permits with permit modifications pending approval and a 100% success rate on permit renewals historically
Contaminated Materials	**Mobile Units:** Expands and strengthens customer base by providing treatment services onsite
Dredging	**Environmental Dredging:** identified sizable upcoming projects to clean up contaminated waterways that will contribute to current business line backlog

GROWTH OPPORTUNITIES – RAIL

STRONG REVENUE GROWTH IN CORE PRODUCTS

- **Protran Technology:** Suite of collision and advance safety warning systems; measurement and diagnostic technologies to monitor track conditions and plan maintenance
- **Equipment & Services:** Significant international opportunities, capture increased spending by Metros
- **Aftermarket Parts:** Increase penetration of large installed base; non-OEM strategy



(1) CAGR attributable to Spare Parts, Protran Sales and Equipment.

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INNOVATION DRIVEN GROWTH

A CULTURE GROUNDED IN SOLVING CUSTOMER NEED SUPPORTED BY BUSINESS DEVELOPMENT AND HOME-GROWN TECHNOLOGIES

INSIGHT → IDEA → FILTERING & EVALUATION → DEVELOPMENT → EXECUTION

- Solving environmental challenges & preserving natural resources
- Achieving productivity & cost improvements
- Strengthening safety performance
- Supporting infrastructure rail investments & performance
- Supporting energy reliability & independence

SOME OF OUR INNOVATIVE SOLUTIONS

STEAM BOXES
MOBILE SCRAP SHEAR
FALCON METAL RECOVERY

CALLISTO TRACK GEOMETRY SOLUTIONS
STONEBLOWING
TX16 PRODUCTION / SWITCH TAMPER

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GROWTH OPPORTUNITIES – SHIFTING FOCUS TO PORTFOLIO CHANGING M&A

INVESTMENT CRITERIA

- Profitable business model strategically aligned with Harsco's growth objectives
- Value-enhancing and earnings accretive in the short-term
- Opportunity to deliver cost and/or revenue synergies
- Attractive characteristics (e.g. reduced cyclicality, unique technology or access to attractive market)
- Meets risk-adjusted IRR hurdle rates through the cycle
- Maintains reasonable leverage ratios

Growth is Balanced Between Organic and Acquisitions

JUNE 2019: ACQUIRED CLEAN EARTH INC. FOR $628 MILLION IN CASH

Greatest Near Term Opportunities are in Environmental Solutions

MAY 2018: ALTEK ACQUIRED FOR £45M CASH

DELIVERING BUSINESS VALUE ACROSS OUR SUSTAINABILITY FOCUS AREAS

SERVING OUR CUSTOMERS

Helping our customers solve their most pressing sustainability challenges

- Our vision is to be a global leader of environmental solutions.
- Each of our divisions are delivering environmental products and services to global customers – a key component of our business today and of our growth strategy.

PRESERVING OUR ENVIRONMENT

Striving to eliminate or reduce our impacts globally

- We are committed to providing the highest-quality environmental management in our operations and improving our environmental footprint through continuous improvement efforts.

PROTECTING OUR PEOPLE

Ensuring a safe workplace

- Safety is of paramount importance in everything we do – our goal, each and every day, is that our people return home unharmed.

INVESTING IN OUR PEOPLE & COMMUNITIES

Supporting our communities and employees' growth

- We invest in the career development of our global employees, knowing that diversity of perspective, backgrounds, and talents strengthen our business.
- We are also committed to building strong, sustainable communities where we live and work.

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2018 KEY FACTS & FIGURES – ENVIRONMENTAL & SAFETY

HARSCO ENVIRONMENTAL

25 MILLION — 25 MILLION TONS OF MATERIAL PROCESSED

10 MILLION — 10 MILLION TONS OF METAL RECOVERED & RECYCLED

5 MILLION — 5 MILLION TONS OF VALUE-ADDED PRODUCTS MARKETED

MORE THAN **40%** OF OUR FACILITIES ARE ISO 14001 CERTIFIED

CLEANEARTH™ A HARSCO COMPANY

4.4M TONS OF SOIL AND DREDGED MATERIAL RECYCLED

59,000 TONS OF FUEL RECYCLED

7.5M LBS OF ELECTRONIC WASTE RECYCLED

99% OF MATERIAL PROCESSED IS REPURPOSED FOR BENEFICIAL USE

HARSCO RAIL — Enabling TECHNOLOGY IN MOTION

95% OF WASTE GENERATED IS RECYCLED OR REPURPOSED

0.29 TOTAL RECORDABLE INCIDENT RATE

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2019 OUTLOOK – CONSOLIDATED

	2019 Outlook[3]	2019 Prior	2018 Actual (previously reported)[4]
PROJECTED OPERATING INCOME	$171 - 176M	$181 - 191M	$191M
ADJUSTED OPERATING INCOME BEFORE ACQUISITION AMORTIZATION[1]	$209 - 214M	$215 - 225M	$194M
PROJECTED DILUTED EARNINGS PER SHARE	$0.86 - 0.92	$0.89 - 1.02	$1.64
ADJUSTED DILUTED EARNINGS PER SHARE (BEFORE ACQUISITION AMORTIZATION)[1]	$1.36 to $1.42	$1.38 to $1.51	$1.40
FREE CASH FLOW BEFORE GROWTH CAPITAL1	$120 - 130M	$125 - 135M	$104M
FREE CASH FLOW[2]	$40 - 50M	$55 - 65M	$73M
ROIC (TTM)[1]	12 - 13%	N/A	N/A

(1) Excludes unusual items. Adjusted operating income and Adjusted diluted earnings per share exclude acquisition amortization expense. See tables at end of presentation for GAAP to non-GAAP reconciliations
(2) See tables at end of presentation for GAAP to non-GAAP reconciliations.
(3) Includes Harsco Industrial for H1 2019 and Clean Earth for H2 2019.
(4) Restated 2018 financial information to reflect Harsco Industrial as Discontinued Operations is included in the supporting schedules.

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POSITIONED TO DELIVER SUSTAINABLE GROWTH & VALUE

High-performing businesses well-positioned to deliver earnings growth

Significant financial flexibility and FCF to pursue growth opportunities and enhance shareholder returns

ROIC-focused approach

Positioned to capitalize on favorable market and industry trends

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Appendix

EXPERIENCED MANAGEMENT TEAM

NICHOLAS GRASBERGER
Chairman, President and Chief Executive Officer

TRACEY MCKENZIE
SVP & Chief HR Officer

RUSS MITCHELL
VP & Chief Operating Officer of Environmental

CHRIS DODS
President of Clean Earth

PETER MINAN
SVP & Chief Financial Officer

RUSSELL HOCHMAN
SVP, General Counsel, Chief Compliance Officer & Corporate Secretary

JESWANT GILL
President of Rail

SCOTT GERSON
President of Industrial

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EXPERIENCED BOARD OF DIRECTORS

CAROLANN HAZNEDAR

- Serves on the Board of Directors of Allison Transmission
- Retired Senior Vice President, Americas for DuPont Performance Materials
- 30+ years of management experience, leading several global businesses at E. I. du Pont de Nemours and Company

DAVID C. EVERITT

- Lead Independent Director
- Former Co-Leader of Deere & Company's Agriculture and Turf Division
- Serves on the Board of Directors of Allison Transmission, Brunswick Corporation and Nutrien Ltd.

EDGAR M. PURVIS

- Retired Executive Vice President and Chief Operating Officer of Emerson Electric Company
- Former member of the executive board of the Air-Conditioning, Heating and Refrigeration Institute

F. NICHOLAS GRASBERGER

- Chairman of Board of Directors, President and Chief Executive Officer of Harsco
- Serves on the Board of Directors of Louisiana-Pacific Corporation
- Former Managing Director of Precision Polymers Division of Fenner Plc and Former Chief Financial Officer of Armstrong Holdings, Inc

JAMES F. EARL

- Retired Executive Vice President of GATX Corporation and President – GATX Rail International

KATHY G. EDDY

- Founding partner of McDonough, Eddy, Parsons & Baylous, A.C., a public accounting and financial services corporation
- Former Chair of the American Institute of Certified Public Accountants Board of Directors

MARIO LONGHI

- Former President and Chief Executive Officer of United States Steel Corporation (U.S. Steel)
- Former President and Chief Executive Officer of Gerdau Ameristeel Corporation
- Serves on the Board of Directors of ITT Corporation

PHILLIP C. WIDMAN

- Serves on the Board of Directors of Sturm, Ruger & Company, Inc. and Vectrus, Inc.
- Former Senior Vice President and CFO of Terex
- Former Executive Vice President and CFO of Philip Services Corporation

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Q3 2019 FINANCIAL SUMMARY

KEY PERFORMANCE INDICATORS

- Q3 adjusted operating income of $57 million was within prior guidance range
- Environmental delivered Y/Y improvement despite weakening end-markets
- Clean Earth realized strong growth relative to prior-year quarter
- Rail lower Y/Y as anticipated due to difficult 2018 comparison period
- Adjusted EPS was 36c; compares to guidance range of 35-41c
- Q3 FCF consistent with expectation
- Repurchased 1.4 million shares
- Net leverage ratio = 2.2x

		CHANGE VS. 2018	
$ in millions except EPS	Q3 2019	$	% or bps
Revenues	423	72	20%
GAAP Operating Income	47	5	12%
% of Sales	*11.0%*		*(90)bps*
Adjusted Operating Income excluding acquisition amortization expense[1]	57	13	29%
% of Sales[1]	*13.5%*		100bps
GAAP Diluted Earnings Per Share	0.22	(0.07)	(24)%
Adjusted Diluted Earnings Per Share excluding acquisition amortization expense[1]	0.36	0.04	13%
Free Cash Flow[2]	5	(15)	nmf
ROIC (TTM)[1]	12.5%		

nmf = not meaningful.
(1) Excludes unusual items. See tables at end of presentation for GAAP to non-GAAP reconciliations.
(2) See tables at end of presentation for GAAP to non-GAAP reconciliations.

HARSCO

Q3 2019 ENVIRONMENTAL

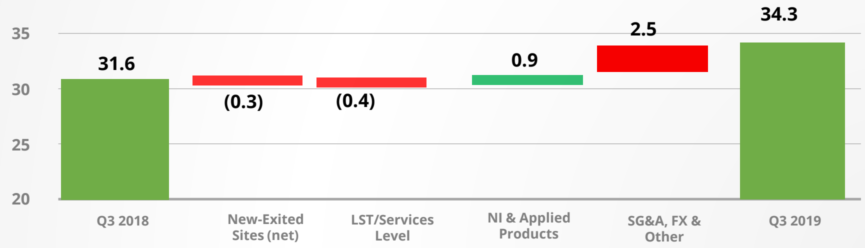
SUMMARY RESULTS

$ in millions

	Q3 2019	Q3 2018	% or bps
Revenues, as reported	261	269	(3)%
Operating Income – GAAP	33	29	12%
Adjusted Operating Income excluding acquisition amortization expense[1]	34	32	8%
Adjusted Operating Margin[1]	13.1%	11.8%	
Free Cash Flow (YTD)	10	49	(80)%
ROIC (TTM)[1]	11.4%	12.6%	(120)bps

ADJUSTED OPERATING INCOME BRIDGE[1]

$ in millions



- Revenues change mainly attributable to FX translation impacts
- Adjusted OI before acquisition amortization change reflects new site and applied product contributions and lower SG&A spending; partially offset by FX impacts and site exits
- YTD FCF change reflects increase in growth-related capital spending

nmf = not meaningful.
(1) Excludes unusual items; see tables at end of presentation for GAAP to non-GAAP reconciliations.

HARSCO

Q3 2019 CLEAN EARTH

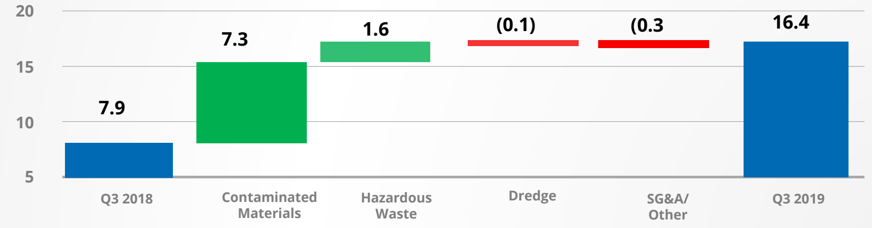
SUMMARY RESULTS

$ in millions

	Q3 2019	Q3 2018	% or bps
Revenues, as reported	88	71	23%
Operating Income – GAAP	11	4	173%
Adjusted Operating Income excluding acquisition amortization expense[1] 1	16	8	107%
Adjusted Operating Margin[1]	18.7%	11.1%	
Free Cash Flow (YTD)	12	N/A	nmf

ADJUSTED OPERATING INCOME BRIDGE[1]

$ in millions



- Revenues increase as the result of strong volume growth and price-mix benefits in contaminated and hazardous material processing as well as acquisitions
- Adjusted operating income improvement driven by the above factors

nmf = not meaningful.
(1) Excludes unusual items; see tables at end of presentation for GAAP to non-GAAP reconciliations.

HARSCO

Q3 2019 RAIL

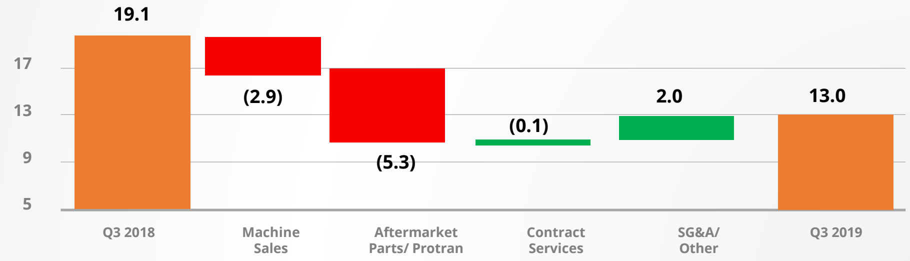
SUMMARY RESULTS

$ in millions

	Q3 2019	Q3 2018	% or bps
Revenues, as reported	75	83	(10)%
Operating Income – GAAP	12	19	(36)%
Adjusted Operating Income excluding acquisition amortization expense[1]	13	19	(32)%
Adjusted Operating Margin[1]	17.5%	23.1%	
Free Cash Flow (YTD)	(45)	(2)	nmf
ROIC (TTM)[1]	36.3%	42.3%	(600)bps

OPERATING INCOME BRIDGE

$ in millions



- Revenue change driven by lower equipment and after-market parts volumes compared to strong prior year period
- Adjusted operating income decrease attributable to above and a less favorable sales mix; partially offset by manufacturing cost gains
- YTD FCF impacted by higher capital spending and change in working capital

nmf = not meaningful.
(1) Excludes unusual items; see tables at end of presentation for GAAP to non-GAAP reconciliations.

2019 SEGMENT OUTLOOK

Excluding unusual items and acquisition amortization			2019 VERSUS 2018
	**REVENUES**		Low-single digits %, before FX translation impacts
	OPERATING INCOME		Unchanged to up low-single digits % compared with 2018, before FX impacts
	DRIVERS	+	New contracts, operational savings
		−	Exited sites, LST/service demand, investments, FX translation
	**REVENUES**	▲	30% to 35%
	OPERATING INCOME	▲	30% to 35%
	DRIVERS	+	Backlog, global demand for MOW equipment and after-market parts, Protran Technology growth, productivity initiatives
		−	R&D and SG&A investments, Contracting services
	**REVENUES**		H2 revenues of approximately $160 million
	OPERATING INCOME		H2 range of $32 to $35 million
	DRIVERS	+	Acquisitions, organic growth including new facilities and waste-streams, operating / logistics savings, Dredge projects
		−	Modest SG&A growth
CORPORATE COSTS			$24 to $25 million for the full-year

HARSCO

Q4 2019 OUTLOOK

Adjusted operating income before acquisition amortization expense[1] is expected to be between

$53M–$58M

Adjusted diluted earnings per share before acquisition amortization expense[1] of

$0.30–$0.36

Corporate costs **comparable to the prior-year quarter as reported**

YEAR-OVER-YEAR CONSIDERATIONS INCLUDE:

HARSCO ENVIRONMENTAL

New site contributions and lower administrative spending, partially offset by lower customer output and site exits

HARSCO RAIL Enabling TECHNOLOGY IN MOTION

Higher volumes and improved product-sales mix for equipment, after-market parts and Protran Technology products

CLEANEARTH A HARSCO COMPANY

Improved processing volume and margins in contaminated and dredge material processing

(1) Adjusted operating income and adjusted diluted earnings per share are non-GAAP numbers. See tables at end of presentation for GAAP to non-GAAP reconciliations.

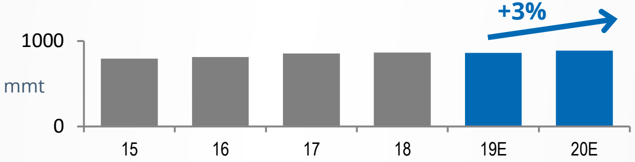
BUSINESS SENSITIVE TO MACRO DRIVERS

MANY BUSINESS DRIVERS | BUSINESS VARIABLES | IMPACT TO BOTTOM LINE

MATERIALS MANAGEMENT AND MELTSHOP SERVICES

- Liquid steel production
- Fixed fees
- Equipment / labor rental demand

Liquid Steel Production[1]



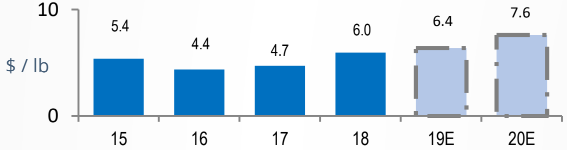
Within current scope of operations…

~1% liquid steel production change equals → **~$2.2M** segment OI improvement

RESOURCE RECOVERY

- Scrap price
- Nickel price
- Chrome price
- Iron price

Nickel Price

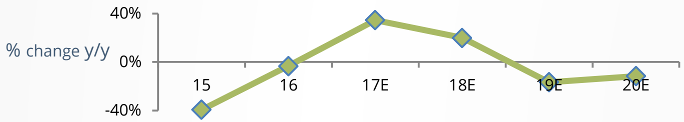


$1 nickel price change equals → **~$4M** segment OI improvement

ENVIRONMENTAL PRODUCTS

- Abrasive demand and price
- Roofing demand & price

Scrap Price[2]



10% scrap price change equals → **~$2.0M** segment OI improvement

(1) Global Liquid Steel Production excluding China Production

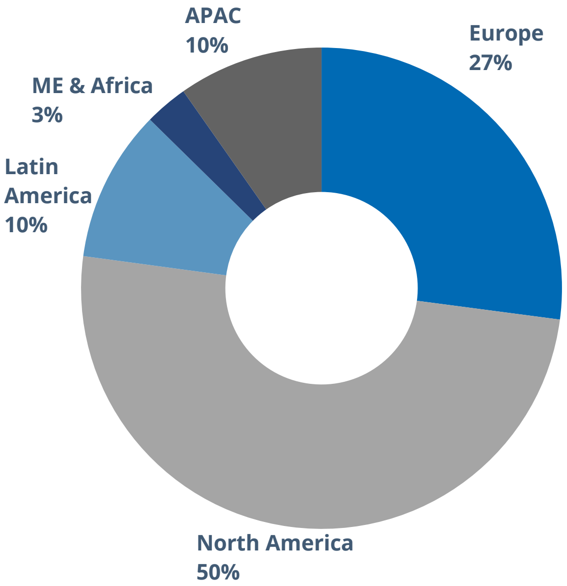
(2) (2) Reflects US and European Shredded, and HMS #1 forecasts

Source: World Steel Association, Deutsche Bank, Bank of America Merrill Lynch, Goldman Sachs, Citi Research, Barclays, Credit Suisse

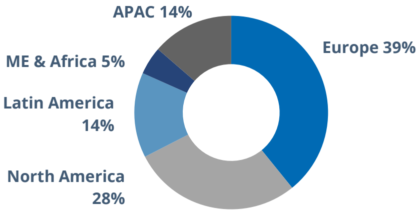
HARSCO

REVENUE MIX BY GEOGRAPHY[1,2]

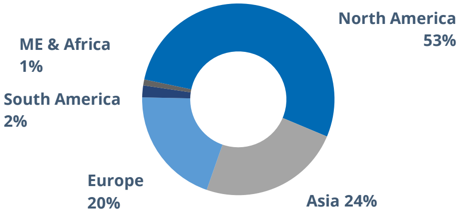
COMPANY



HARSCO ENVIRONMENTAL



HARSCO RAIL
Enabling TECHNOLOGY IN MOTION



(1) Revenue mix by location of origin for Company, Environmental and Industrial. Rail revenue mix is by location of customer.

(2) Company 2018 Information, as reported.

HARSCO

RECONCILIATION OF NON-GAAP MEASURES

HARSCO CORPORATION

RECONCILIATION OF PRO FORMA REVENUE BY SEGMENT TO REVENUE BY SEGMENT; AND PRO FORMA EBITDA BY SEGMENT AND ADJUSTED PRO FORMA EBITDA BY SEGMENT TO OPERATING INCOME (LOSS) BY SEGMENT (Unaudited)

(In thousands)	Harsco Environmental	Harsco Clean Earth	Harsco Rail	Corporate	Total
Twelve Months Ended December 31, 2018					
Revenue	$ 1,068,304	$ —	$ 279,294	$ 74	$ 1,347,672
Acquisition of Clean Earth	—	266,916	—	—	266,916
Pro forma revenue	$ 1,068,304	$ 266,916	$ 279,294	$ 74	$ 1,614,588
Operating income (loss)	$ 121,195	$ —	$ 37,341	$ (27,839)	$ 130,697
Acquisition of Clean Earth	—	19,689	—	—	19,689
Pro forma operating income (loss)	121,195	19,689	37,341	(27,839)	150,386
Depreciation and amortization	115,047	18,072	4,287	2,737	140,143
Pro forma EBITDA	236,242	37,761	41,628	(25,102)	290,529
Harsco Environmental adjustment to slag disposal accrual	(3,223)	—	—	—	(3,223)
Harsco Environmental Segment change in fair value to contingent consideration liability	(2,939)	—	—	—	(2,939)
Altek acquisition costs	753	—	—	431	1,184
Harsco Rail Segment improvement initiative costs	—	—	640	—	640
Other	—	4,099	—	—	4,099
Adjusted pro forma EBITDA	$ 230,833	$ 41,860	$ 42,268	$ (24,671)	$ 290,290

Pro forma revenue, Pro forma EBITDA and Adjusted pro forma EBITDA are non-GAAP financial measures. Pro forma revenue consists of revenue and includes the Clean Earth acquisition. Pro forma EBITDA consists of operating income from continuing operations adjusted to add back depreciation and amortization (excluding amortization of deferred financing costs) and includes the Clean Earth acquisition. Adjusted pro forma EBITDA consists of Pro forma EBITDA adjusted to add back certain unusual items. The Company's management believes that Pro forma revenue, Pro forma EBITDA and Adjusted pro forma EBITDA are meaningful to investors because management reviews these measures in assessing and evaluating performance. However, these measures should be considered in addition to, rather than as substitutes for Operating income from continuing operations and other information provided in accordance with U.S. GAAP. The Company's method of calculating Pro forma revenue, Pro forma EBITDA and Adjusted pro forma EBITDA may differ from methods used by other companies and, as a result, these measures may not be comparable to other similarly titled measures disclosed by other companies.

HARSCO

RECONCILIATION OF NON-GAAP MEASURES

HARSCO CORPORATION

RECONCILIATION OF ADJUSTED DILUTED EARNINGS PER SHARE BEFORE ACQUISITION AMORTIZATION EXPENSE TO DILUTED EARNINGS (LOSS) PER SHARE FROM CONTINUING OPERATIONS AS REPORTED (Unaudited)

	Three Months Ended September 30		Nine Months Ended September 30	
	2019	**2018**	**2019**	**2018**
Diluted earnings per share from continuing operations as reported	**$ 0.22**	$ 0.29	**$ 0.31**	$ 0.79
Corporate strategic costs (a)	**0.03**	—	**0.22**	—
Corporate unused debt commitment and amendment fees (b)	**—**	—	**0.09**	0.01
Harsco Environmental Segment provision for doubtful accounts (c)	**0.01**	—	**0.08**	—
Harsco Rail Segment improvement initiative costs (d)	**0.01**	—	**0.06**	—
Harsco Environmental Segment change in fair value to contingent consideration liability (e)	**(0.01)**	—	**(0.05)**	—
Harsco Environmental Segment site exit related (f)	**—**	—	**(0.03)**	—
Harsco Clean Earth Segment severance costs (g)	**0.02**	—	**0.02**	—
Harsco Environmental Segment adjustment to slag disposal accrual (h)	**—**	—	**—**	(0.04)
Altek acquisition costs (i)	**—**	—	**—**	0.01
Deferred tax asset valuation allowance adjustment (j)	**0.03**	—	**0.03**	(0.10)
Taxes on above unusual items (k)	**—**	—	**(0.04)**	—
Adjusted diluted earnings per share from continuing operations	**0.31**	0.30 (l)	**0.67 (l)**	0.68 (l)
Acquisition amortization expense, net of tax	**0.06**	0.02	**0.10**	0.05
Adjusted diluted earnings per share before acquisition amortization expense	**$ 0.36 (l)**	$ 0.32	**$ 0.78 (l)**	$ 0.73

HARSCO

RECONCILIATION OF NON-GAAP MEASURES

(a) Consultant costs at Corporate associated with supporting and executing the Company's growth strategy (Q3 2019 $2.7 million pre-tax; nine months 2019 $17.9 million pre-tax).
(b) Costs at Corporate related to the unused bridge financing commitment and Term Loan B amendment (nine months 2019 $7.4 million pre-tax) and the amendment of the Company's existing Senior Secured Credit Facility in order to reduce the interest rate applicable to the Term Loan Facility (nine months 2018 $1.0 million pre-tax).
(c) Harsco Environmental Segment provision for doubtful accounts related to a customer in the U.K. entering administration (Q3 $0.8 million pre-tax; nine months 2019 $6.2 million pre-tax).
(d) Costs associated with a productivity improvement initiative in the Harsco Rail Segment (Q3 2019 $0.8 million pre-tax; nine months 2019 $4.6 million pre-tax).
(e) Fair value adjustment to contingent consideration liability related to the acquisition of Altek (Q3 2019 $0.9 million pre-tax; nine months 2019 $4.4 million pre-tax; Q3 2018 and nine months 2018 $0.4 million pre-tax). The Company adjusts Operating income and Diluted earnings per share from continuing operations to exclude the impact of the change in fair value to the acquisition-related contingent consideration liability for the Altek acquisition because it believes that the adjustment for this item more closely correlates the reported financial measures with the ordinary and ongoing course of the Company's operations.
(f) Harsco Environmental Segment site exit related (Q3 2019 $0.2 million pre-tax; nine months 2019 $2.4 million pre-tax).
(g) Harsco Clean Earth Segment severance recognized (Q3 and nine month 2019 $1.3 million pre-tax).
(h) Harsco Environmental Segment adjustment to previously accrued amounts related to the disposal of certain slag material in Latin America (nine months 2018 $3.2 million pre-tax).
(i) Costs associated with the acquisition of Altek recorded in the Harsco Environmental Segment (nine months 2018 $0.8 million pre-tax) and at Corporate (nine months 2018 $0.4 million pre-tax).
(j) Adjustment of certain existing deferred tax asset valuation allowances as a result of a site exit in a certain jurisdiction in 2019 and the Altek acquisition in 2018 (Q3 and nine months 2019 $2.8 million; nine months 2018 $8.3 million).
(k) Unusual items are tax-effected at the global effective tax rate, before discrete items, in effect at the time the unusual item is recorded, except for unusual items from countries where no tax benefit can be realized, in which case a zero percent tax rate is used.
(l) Does not total due to rounding.

The Company's management believes Adjusted diluted earnings per share before acquisition amortization expense, which is a non-U.S. GAAP financial measure, is useful to investors because it provides an overall understanding of the Company's historical and future prospects. Exclusion of unusual items permits evaluation and comparison of results for the Company's core business operations, and it is on this basis that management internally assesses the Company's performance. Exclusion of acquisition-related intangible asset amortization expense, the amount of which can vary by the timing, size and nature of the Company's acquisitions, facilitates more consistent internal comparisons of operating results over time between the Company's newly acquired and long-held businesses, and comparisons with both acquisitive and non-acquisitive peer companies. It is important to note that such intangible assets contribute to revenue generation and that intangible asset amortization related to past acquisitions will recur in future periods until such intangible assets have been fully amortized. This measure should be considered in addition to, rather than as a substitute for, other information provided in accordance with U.S. GAAP.

RECONCILIATION OF NON-GAAP MEASURES

HARSCO CORPORATION

RECONCILIATION OF ADJUSTED DILUTED EARNINGS PER SHARE BEFORE ACQUISITION AMORTIZATION EXPENSE AND INCLUDING DISCONTINUED OPERATIONS TO DILUTED EARNINGS PER SHARE FROM CONTINUING OPERATIONS AS REPORTED (Unaudited)

	Twelve Months Ended December 31, 2018	
Diluted earnings per share from continuing operations as reported (a)	$ 1.20	
Harsco Environmental adjustment to slag disposal accrual (b)	(0.04)	
Harsco Environmental Segment change in fair value to contingent consideration liability (c)	(0.04)	
Altek acquisition costs (d)	0.01	
Loss on early extinguishment of debt (e)	0.01	
Harsco Rail Segment improvement initiative costs (f)	0.01	
Taxes on above unusual items (g)	(0.01)	
Impact of U.S. tax reform on income tax benefit (expense) (h)	(0.18)	
Deferred tax asset valuation allowance adjustment (i)	(0.10)	
Adjusted diluted earnings per share from continuing operations	0.88	(j)
Acquisition amortization expense, net of tax	0.07	
Adjusted diluted earnings per share from continuing operations excluding acquisition amortization expense	0.94	(j)
Diluted earnings per share from the former Harsco Industrial Segment, excluding acquisition amortization expense	0.45	
Adjusted diluted earnings per share before acquisition amortization expense and including discontinued operations	$ 1.40	(j)

HARSCO

RECONCILIATION OF NON-GAAP MEASURES

(a) Prior period amounts have been updated to reflect the former Harsco Industrial Segment as discontinued operations.
(b) Harsco Environmental adjustment to previously accrued amounts related to the disposal of certain slag material in Latin America ($3.2 million pre-tax).
(c) Fair value adjustment to contingent consideration liability related to the acquisition of Altek ($2.9 million pre-tax). The Company adjusts Operating income and Diluted earnings per share from continuing operations to exclude the impact of the change in fair value to the acquisition-related contingent consideration liability for the Altek acquisition because it believes that the adjustment for this item more closely correlates the reported financial measures with the ordinary and ongoing course of the Company's operations.
(d) Costs associated with the acquisition of Altek recorded in the Harsco Environmental Segment ($0.8 million pre-tax) and at Corporate ($0.4 million pre-tax).
(e) Loss on early extinguishment of debt associated with amending the Company's existing Senior Secured Credit Facility in order to reduce the interest rate applicable to the Term Loan Facility ($1.0 million pre-tax).
(f) Costs associated with a productivity improvement initiative in the Harsco Rail Segment ($0.6 million pre-tax).
(g) Unusual items are tax-effected at the global effective tax rate, before discrete items, in effect at the time the unusual item is recorded, except for unusual items from countries where no tax benefit can be realized, in which case a zero percent tax rate is used.
(h) The Company recorded a benefit (expense) as a result of revaluing net deferred tax assets and liabilities as a result of U.S. tax reform ($15.4 million benefit).
(i) Adjustment of certain existing deferred tax asset valuation allowances as a result of the Altek acquisition ($8.3 million).
(j) Does not total due to rounding.

The Company’s management believes Adjusted diluted earnings per share before acquisition amortization expense and including discontinued operations, which is a non-U.S. GAAP financial measure, is useful to investors because it provides an overall understanding of the Company’s historical and future prospects. Exclusion of unusual items permits evaluation and comparison of results for the Company’s core business operations, and it is on this basis that management internally assesses the Company’s performance. Exclusion of acquisition-related intangible asset amortization expense, the amount of which can vary by the timing, size and nature of the Company’s acquisitions, facilitates more consistent internal comparisons of operating results over time between the Company’s newly acquired and long-held businesses, and comparisons with both acquisitive and non-acquisitive peer companies. It is important to note that such intangible assets contribute to revenue generation and that intangible asset amortization related to past acquisitions will recur in future periods until such intangible assets have been fully amortized. Inclusion of discontinued operations, which relate principally to the Harsco Industrial Segment, provides comparability to prior periods. This measure should be considered in addition to, rather than as a substitute for, other information provided in accordance with U.S. GAAP.

HARSCO

RECONCILIATION OF NON-GAAP MEASURES

HARSCO CORPORATION

RECONCILIATION OF PROJECTED DILUTED EARNINGS PER SHARE AND ADJUSTED DILUTED EARNINGS PER SHARE BEFORE ESTIMATED ACQUISITION AMORTIZATION EXPENSE TO DILUTED EARNINGS PER SHARE FROM CONTINUING OPERATIONS (Unaudited)

	Projected Three Months Ending December 31 2019		Projected Twelve Months Ending December 31 2019	
	Low	High	Low	High
Diluted earnings per share from continuing operations (a)(b)	$ 0.25	$ 0.31	$ 0.60	$ 0.66
Diluted earnings per share from discontinued operations before acquisition amortization expense (c)	—	—	0.26	0.26
Project diluted earnings per share	0.25	0.31	0.86	0.92
Corporate strategic and transaction related costs	—	—	0.22	0.22
Corporate unused debt commitment and amendment fees	—	—	0.09	0.09
Harsco Environmental Segment provision for doubtful accounts	—	—	0.08	0.08
Harsco Environmental Segment site exit cost related	—	—	(0.03)	(0.03)
Harsco Clean Earth Segment severance costs	—	—	0.02	0.02
Deferred tax asset valuation allowance adjustment	—	—	0.03	0.03
Harsco Rail Segment improvement initiative costs	—	—	0.06	0.06
Harsco Environmental Segment change in fair value to contingent consideration liability	—	—	(0.05)	(0.05)
Taxes on above unusual items	—	—	(0.04)	(0.04)
Adjusted diluted earnings per share	0.25	0.31	1.23 (d)	1.29 (d)
Estimated acquisition amortization expense, net of tax	0.05	0.05	0.13	0.13
Adjusted diluted earnings per share before estimated acquisition amortization expense	$ 0.30	$ 0.36	$ 1.36	$ 1.42

(a) Includes results for the Harsco Clean Earth Segment for the period from July 1, 2019 to December 31, 2019.
(b) Excludes results for the former Harsco Industrial Segment.
(c) Includes results for the former Harsco Industrial Segment for the period from January 1, 2019 to June 30, 2019.
(d) Does not total due to rounding.

The Company's management believes Adjusted diluted earnings per share before estimated acquisition amortization expense, which is a non-U.S. GAAP financial measure, is useful to investors because it provides an overall understanding of the Company's historical and future prospects. Exclusion of unusual items permits evaluation and comparison of results for the Company's core business operations, and it is on this basis that management internally assesses the Company's performance. Exclusion of acquisition-related intangible asset amortization expense, the amount of which can vary by the timing, size and nature of the Company's acquisitions, facilitates more consistent internal comparisons of operating results over time between the Company's newly acquired and long-held businesses, and comparisons with both acquisitive and non-acquisitive peer companies. It is important to note that such intangible assets contribute to revenue generation and that intangible asset amortization related to past acquisitions will recur in future periods until such intangible assets have been fully amortized. Inclusion of discontinued operations, which relate principally to the Harsco Industrial Segment, provides comparability to prior periods. This measure should be considered in addition to, rather than as a substitute for, other information provided in accordance with U.S. GAAP.

RECONCILIATION OF NON-GAAP MEASURES

HARSCO CORPORATION

RECONCILIATION OF ADJUSTED OPERATING INCOME (LOSS) BEFORE ACQUISITION AMORTIZATION EXPENSE BY SEGMENT TO OPERATING INCOME (LOSS) AS REPORTED BY SEGMENT (Unaudited)

(In thousands)	Harsco Environmental	Harsco Clean Earth	Harsco Rail	Corporate	Consolidated Totals
Three Months Ended September 30, 2019:					
Operating income (loss) as reported	$ 32,794	$ 11,308	$ 12,115	$ (9,472)	$ 46,745
Corporate strategic costs	—	—	—	2,743	2,743
Harsco Clean Earth Segment severance costs	—	1,254	—	—	1,254
Harsco Environmental Segment change in fair value to contingent consideration liability	(906)	—	—	—	(906)
Harsco Rail Segment improvement initiative costs	—	—	845	—	845
Harsco Environmental Segment provision for doubtful accounts	815	—	—	—	815
Harsco Environmental Segment site exit related	(156)	—	—	—	(156)
Adjusted operating income (loss)	32,547	12,562	12,960	(6,729)	51,340
Acquisition amortization expense	1,751	3,834	84	—	5,669
Adjusted operating income (loss) before acquisition amortization expense	$ 34,298	$ 16,396	$ 13,044	$ (6,729)	$ 57,009
Revenues as reported	$ 260,883	$ 87,639	$ 74,633	$ —	$ 423,155
Adjusted operating margin (%)	13.1%	18.7%	17.5%		13.5%

The Company's management believes Adjusted operating income (loss) before acquisition amortization expense, which is a non-U.S. GAAP financial measure, is useful to investors because it provides an overall understanding of the Company's historical and future prospects. Exclusion of unusual items permits evaluation and comparison of results for the Company's core business operations, and it is on this basis that management internally assesses the Company's performance. Exclusion of acquisition-related intangible asset amortization expense, the amount of which can vary by the timing, size and nature of the Company's acquisitions, facilitates more consistent internal comparisons of operating results over time between the Company's newly acquired and long-held businesses, and comparisons with both acquisitive and non-acquisitive peer companies. It is important to note that such intangible assets contribute to revenue generation and that intangible asset amortization related to past acquisitions will recur in future periods until such intangible assets have been fully amortized. This measure should be considered in addition to, rather than as a substitute for, other information provided in accordance with U.S. GAAP.

RECONCILIATION OF NON-GAAP MEASURES

HARSCO CORPORATION

RECONCILIATION OF ADJUSTED OPERATING INCOME (LOSS) BEFORE ACQUISITION AMORTIZATION EXPENSE BY SEGMENT TO OPERATING INCOME (LOSS) AS REPORTED BY SEGMENT (Unaudited)

(In thousands)	Harsco Environmental	Harsco Clean Earth	Harsco Rail	Corporate	Consolidated Totals
Three Months Ended September 30, 2018:					
Operating income (loss) as reported	$ 29,338	$ —	$ 19,000	$ (6,579)	$ 41,759
Harsco Environmental Segment change in fair value to contingent consideration liability	412	—	—	—	412
Adjusted operating income (loss)	29,750	—	19,000	(6,579)	42,171
Acquisition amortization expense	1,872	—	71	—	1,943
Adjusted operating income (loss) before acquisition amortization expense	$ 31,622	$ —	$ 19,071	$ (6,579)	$ 44,114
Revenues as reported	$ 268,881	$ —	$ 82,682		$ 351,563
Adjusted operating margin (%)	11.8%		23.1%		12.5%

The Company's management believes Adjusted operating income (loss) before acquisition amortization expense, which is a non-U.S. GAAP financial measure, is useful to investors because it provides an overall understanding of the Company's historical and future prospects. Exclusion of unusual items permits evaluation and comparison of results for the Company's core business operations, and it is on this basis that management internally assesses the Company's performance. Exclusion of acquisition-related intangible asset amortization expense, the amount of which can vary by the timing, size and nature of the Company's acquisitions, facilitates more consistent internal comparisons of operating results over time between the Company's newly acquired and long-held businesses, and comparisons with both acquisitive and non-acquisitive peer companies. It is important to note that such intangible assets contribute to revenue generation and that intangible asset amortization related to past acquisitions will recur in future periods until such intangible assets have been fully amortized. This measure should be considered in addition to, rather than as a substitute for, other information provided in accordance with U.S. GAAP.

RECONCILIATION OF NON-GAAP MEASURES

HARSCO CORPORATION

RECONCILIATION OF ADJUSTED HARSCO CLEAN EARTH SEGMENT OPERATING INCOME BEFORE ACQUISITION AMORTIZATION EXPENSE TO HARSCO CLEAN EARTH SEGMENT OPERATING INCOME (Unaudited)

(In millions)	Three Months Ended September 30 2018
Operating income	$ 4,278
Acquisition amortization expense	3,649
Adjusted operating income before acquisition amortization expense	$ 7,929
Revenues as reported	$ 71,117
Adjusted operating margin (%)	11.1%

The Company's management believes Adjusted Harsco Clean Earth Segment operating income before acquisition amortization expense, which is a non-U.S. GAAP financial measure, is useful to investors because it provides an overall understanding of the Clean Earth Segment for comparative purposes. Exclusion of acquisition related amortization expense permits evaluation of comparison of results for the Company's core business operations, and it is on this basis that management internally assesses the Company's performance.

HARSCO

RECONCILIATION OF NON-GAAP MEASURES

HARSCO CORPORATION

RECONCILIATION OF ADJUSTED OPERATING INCOME (LOSS) BEFORE ACQUISITION AMORTIZATION EXPENSE AND INCLUDING DISCONTINUED OPERATIONS BY SEGMENT TO OPERATING INCOME (LOSS) AS REPORTED BY SEGMENT (Unaudited)

	For the Three Months Ended		For the Six Months Ended
(In thousands)	March 31, 2019	June 30, 2019	June 30, 2019
Operating income (a)	$ 19,824	$ 17,799	$ 37,623
Corporate strategic costs	2,739	12,390	15,129
Harsco Environmental Segment provision for doubtful accounts	—	5,359	5,359
Harsco Rail Segment improvement initiative costs	2,648	1,152	3,800
Harsco Environmental Segment change in fair value to contingent consideration liability	369	(3,879)	(3,510)
Harsco Environmental site exit related	(2,271)	—	(2,271)
Adjusted operating income	23,309	32,821	56,130
Acquisition amortization expense	1,939	1,900	3,839
Adjusted operating income before acquisition amortization expense	25,248	34,721	59,969
Discontinued operations - Harsco Industrial before acquisition amortization expense	18,834	20,560	39,394
Adjusted operating income before acquisition amortization expense and including discontinued operations	$ 44,082	$ 55,281	$ 99,363

(a) (a) The operating results of the former Harsco Industrial Segment have been reflected as discontinued operations in the Company's Condensed Consolidated Statement of Operations for all periods presented.

The Company's management believes Adjusted operating income (loss) before acquisition amortization expense and including discontinued operations, which is a non-U.S. GAAP financial measure, is useful to investors because it provides an overall understanding of the Company's historical and future prospects. Exclusion of unusual items permits evaluation and comparison of results for the Company's core business operations, and it is on this basis that management internally assesses the Company's performance. Exclusion of acquisition-related intangible asset amortization expense, the amount of which can vary by the timing, size and nature of the Company's acquisitions, facilitates more consistent internal comparisons of operating results over time between the Company's newly acquired and long-held businesses, and comparisons with both acquisitive and non-acquisitive peer companies. It is important to note that such intangible assets contribute to revenue generation and that intangible asset amortization related to past acquisitions will recur in future periods until such intangible assets have been fully amortized. Inclusion of discontinued operations, which relates principally to the Harsco Industrial Segment, provides comparability to prior periods. This measure should be considered in addition to, rather than as a substitute for, other information provided in accordance with U.S. GAAP.

RECONCILIATION OF NON-GAAP MEASURES

HARSCO CORPORATION

RECONCILIATION OF ADJUSTED OPERATING INCOME (LOSS) BEFORE ACQUISITION AMORTIZATION EXPENSE AND INCLUDING DISCONTINUED OPERATIONS BY SEGMENT TO OPERATING INCOME (LOSS) AS REPORTED BY SEGMENT (Unaudited)

	For the Three Months Ended				For the Year Ended
(In thousands)	March 31, 2018	June 30, 2018	September 30, 2018	December 31, 2018	December 31, 2018
Operating income (a)	$ 22,728	$ 38,064	$ 41,759	$ 28,146	$ 130,697
Harsco Environmental adjustment to slag disposal accrual	—	(3,223)	—	—	(3,223)
Harsco Environmental Segment change in fair value to contingent consideration liability	—	—	412	(3,351)	(2,939)
Altek acquisition costs	—	1,184	—	—	1,184
Harsco Rail Segment improvement initiative costs	—	—	—	640	640
Adjusted operating income	22,728	36,025	42,171	25,435	126,359
Acquisition amortization expense	829	1,197	1,943	1,890	5,859
Adjusted operating income before acquisition amortization expense	23,557	37,222	44,114	27,325	132,218
Discontinued operations - Harsco Industrial before acquisition amortization expense	14,265	16,013	15,802	15,956	62,036
Adjusted operating income before acquisition amortization expense and including discontinued operations	$ 37,822	$ 53,235	$ 59,916	$ 43,281	$ 194,254

(a) The operating results of the former Harsco Industrial Segment have been reflected as discontinued operations in the Company's Condensed Consolidated Statement of Operations for all periods presented.

The Company's management believes Adjusted operating income (loss) before acquisition amortization expense and including discontinued operations, which is a non-U.S. GAAP financial measure, is useful to investors because it provides an overall understanding of the Company's historical and future prospects. Exclusion of unusual items permits evaluation and comparison of results for the Company's core business operations, and it is on this basis that management internally assesses the Company's performance. Exclusion of acquisition-related intangible asset amortization expense, the amount of which can vary by the timing, size and nature of the Company's acquisitions, facilitates more consistent internal comparisons of operating results over time between the Company's newly acquired and long-held businesses, and comparisons with both acquisitive and non-acquisitive peer companies. It is important to note that such intangible assets contribute to revenue generation and that intangible asset amortization related to past acquisitions will recur in future periods until such intangible assets have been fully amortized. Inclusion of discontinued operations, which relates principally to the Harsco Industrial Segment, provides comparability to prior periods. This measure should be considered in addition to, rather than as a substitute for, other information provided in accordance with U.S. GAAP.

HARSCO

RECONCILIATION OF NON-GAAP MEASURES

HARSCO CORPORATION

RECONCILIATION OF ADJUSTED OPERATING INCOME (LOSS) BEFORE ACQUISITION AMORTIZATION EXPENSE AND INCLUDING DISCONTINUED OPERATIONS BY SEGMENT TO OPERATING INCOME (LOSS) AS REPORTED BY SEGMENT (Unaudited)

(In thousands)	Harsco Environmental	Harsco Industrial (a)	Harsco Rail	Corporate	Consolidated Totals
Twelve Months Ended December 31, 2018:					
Operating income (loss) as reported	$ 121,195	$ —	$ 37,341	$ (27,839)	$ 130,697
Harsco Environmental adjustment to slag disposal accrual	(3,223)	—	—	—	(3,223)
Harsco Environmental Segment change in fair value to contingent consideration liability	(2,939)	—	—	—	(2,939)
Altek acquisition costs	753	—	—	431	1,184
Harsco Rail Segment improvement initiative costs	—	—	640	—	640
Adjusted operating income (loss)	115,786	—	37,981	(27,408)	126,359
Acquisition amortization expense	5,553	—	306	—	5,859
Adjusted operating income (loss) before acquisition amortization expense	121,339	—	38,287	(27,408)	132,218
Discontinued operations - Harsco Industrial before acquisition amortization expense	—	62,036	—	—	62,036
Adjusted operating income (loss) before acquisition amortization expense and including discontinued operations	$ 121,339	$ 62,036	$ 38,287	$ (27,408)	$ 194,254
Revenues as reported	$ 1,068,304	$ —	$ 279,294	$ 74	$ 1,347,672
Revenues in discontinued operations	—	374,708	—	—	374,708
Revenues including discontinued operations	$ 1,068,304	$ 374,708	$ 279,294	$ 74	$ 1,722,380
Adjusted operating margin (%)	11.4%		13.7%		9.8%
Adjusted operating margin (%) including discontinued operations	11.4%	16.6%	13.7%		11.3%

(a) The operating results of the former Harsco Industrial Segment has been reflected as discontinued operations in the Company's Condensed Consolidated Statement of Operations for all periods presented.

The Company's management believes Adjusted operating income (loss) before acquisition amortization expense and including discontinued operations, which is a non-U.S. GAAP financial measure, is useful to investors because it provides an overall understanding of the Company's historical and future prospects. Exclusion of unusual items permits evaluation and comparison of results for the Company's core business operations, and it is on this basis that management internally assesses the Company's performance. Exclusion of acquisition-related intangible asset amortization expense, the amount of which can vary by the timing, size and nature of the Company's acquisitions, facilitates more consistent internal comparisons of operating results over time between the Company's newly acquired and long-held businesses, and comparisons with both acquisitive and non-acquisitive peer companies. It is important to note that such intangible assets contribute to revenue generation and that intangible asset amortization related to past acquisitions will recur in future periods until such intangible assets have been fully amortized. Inclusion of discontinued operations, which relates principally to the Harsco Industrial Segment, provides comparability to prior periods. This measure should be considered in addition to, rather than as a substitute for, other information provided in accordance with U.S. GAAP.

HARSCO

RECONCILIATION OF NON-GAAP MEASURES

HARSCO CORPORATION

RECONCILIATION OF ADJUSTED OPERATING INCOME (LOSS) BEFORE ACQUISITION AMORTIZATION EXPENSE AND INCLUDING DISCONTINUED OPERATIONS BY SEGMENT TO OPERATING INCOME (LOSS) AS REPORTED BY SEGMENT (Unaudited)

(In thousands)	Harsco Environmental	Harsco Industrial (a)	Harsco Rail	Corporate	Consolidated Totals
Twelve Months Ended December 31, 2017:					
Operating income (loss) as reported	$ 102,362	$ —	$ 32,953	$ (31,019)	$ 104,296
Harsco Environmental Segment bad debt expense	4,589	—	—	—	4,589
Adjusted operating income (loss)	106,951	—	32,953	(31,019)	108,885
Acquisition amortization expense	2,913	—	398	—	3,311
Adjusted operating income (loss) before acquisition amortization expense	109,864	—	33,351	(31,019)	112,196
Discontinued operations - Harsco Industrial before acquisition amortization expense	—	42,907	—	—	42,907
Adjusted operating income (loss) before acquisition amortization expense and including discontinued operations	$ 109,864	$ 42,907	$ 33,351	$ (31,019)	$ 155,103
Revenues as reported	$ 1,011,328	$ —	$ 295,999	$ 143	$ 1,307,470
Revenues in discontinued operations	—	299,592	—	—	299,592
Revenues including discontinued operations	$ 1,011,328	$ 299,592	$ 295,999	$ 143	$ 1,607,062
Adjusted operating margin (%)	10.9%		11.3%		8.6%
Adjusted operating margin (%) including discontinued operations	10.9%	14.3%	11.3%		9.7%

(a) The operating results of the former Harsco Industrial Segment has been reflected as discontinued operations in the Company's Condensed Consolidated Statement of Operations for all periods presented.

The Company's management believes Adjusted operating income (loss) before acquisition amortization expense and including discontinued operations, which is a non-U.S. GAAP financial measure, is useful to investors because it provides an overall understanding of the Company's historical and future prospects. Exclusion of unusual items permits evaluation and comparison of results for the Company's core business operations, and it is on this basis that management internally assesses the Company's performance. Exclusion of acquisition-related intangible asset amortization expense, the amount of which can vary by the timing, size and nature of the Company's acquisitions, facilitates more consistent internal comparisons of operating results over time between the Company's newly acquired and long-held businesses, and comparisons with both acquisitive and non-acquisitive peer companies. It is important to note that such intangible assets contribute to revenue generation and that intangible asset amortization related to past acquisitions will recur in future periods until such intangible assets have been fully amortized. Inclusion of discontinued operations, which relates principally to the Harsco Industrial Segment, provides comparability to prior periods. This measure should be considered in addition to, rather than as a substitute for, other information provided in accordance with U.S. GAAP.

HARSCO

RECONCILIATION OF NON-GAAP MEASURES

HARSCO CORPORATION

RECONCILIATION OF ADJUSTED OPERATING INCOME BEFORE ACQUISITION AMORTIZATION EXPENSE AND INCLUDING DISCONTINUED OPERATIONS TO OPERATING INCOME (LOSS) AS REPORTED (Unaudited)

(In thousands)	Consolidated Totals
Twelve Months Ended December 31, 2016:	
Operating income as reported	$ 35,513
Harsco Rail Segment forward contract loss provision	45,050
Harsco Environmental Segment site exit	5,100
Harsco Environmental Segment separation costs	3,287
Harsco Environmental Segment cumulative translation adjustment liquidation	(1,157)
Adjusted operating income	87,793
Acquisition amortization expense	6,125
Adjusted operating income before acquisition amortization expense	93,918
Discontinued operations - Harsco Industrial before acquisition amortization expense	31,179
Adjusted operating income before acquisition amortization expense and including discontinued operations	$ 125,097
Revenues as reported	$ 1,203,681
Revenues in discontinued operations	247,542
Revenues including discontinued operations	$ 1,451,223
Adjusted operating margin (%)	7.8%
Adjusted operating margin (%) including discontinued operations	8.6%

(a) The operating results of the former Harsco Industrial Segment has been reflected as discontinued operations in the Company's Condensed Consolidated Statement of Operations for all periods presented.

The Company's management believes Adjusted operating income before acquisition amortization expense and including discontinued operations, which is a non-U.S. GAAP financial measure, is useful to investors because it provides an overall understanding of the Company's historical and future prospects. Exclusion of unusual items permits evaluation and comparison of results for the Company's core business operations, and it is on this basis that management internally assesses the Company's performance. Exclusion of acquisition-related intangible asset amortization expense, the amount of which can vary by the timing, size and nature of the Company's acquisitions, facilitates more consistent internal comparisons of operating results over time between the Company's newly acquired and long-held businesses, and comparisons with both acquisitive and non-acquisitive peer companies. It is important to note that such intangible assets contribute to revenue generation and that intangible asset amortization related to past acquisitions will recur in future periods until such intangible assets have been fully amortized. Inclusion of discontinued operations, which relates principally to the Harsco Industrial Segment, provides comparability to prior periods. This measure should be considered in addition to, rather than as a substitute for, other information provided in accordance with U.S. GAAP.

HARSCO

RECONCILIATION OF NON-GAAP MEASURES

HARSCO CORPORATION

RECONCILIATION OF PROJECTED OPEARTING INCOME AND ADJUSTED OPERATING INCOME BEFORE ACQUISITION AMORTIZATION EXPENSE TO OPERATING INCOME (Unaudited)

	Projected Three Months Ended		Projected Twelve Months Ended	
	December 31, 2019		December 31, 2019	
(In millions)	Low	High	Low	High
Operating income from continuing operations (a) (b)	$ 47	$ 52	$ 132	$ 137
Operating income from the former Harsco Industrial Segment before acquisition amortization (c)	—	—	39	39
Project operating income	47	52	171	176
Corporate strategic and transaction related costs	—	—	18	18
Harsco Environmental Segment provision for doubtful accounts	—	—	6	6
Harsco Rail Segment improvement initiative costs	—	—	5	5
Harsco Environmental Segment change in fair value to contingent consideration liability	—	—	(4)	(4)
Harsco Environmental Segment site exit related	—	—	(2)	(2)
Adjusted operating income	47	52	194	199
Estimated acquisition amortization expense	6	6	15	15
Adjusted operating income before acquisition amortization expense	$ 53	$ 58	$ 209	$ 214

(a) Includes results for the Harsco Clean Earth Segment for the period from July 1, 2019 to December 31, 2019.
(b) Excludes results for the former Harsco Industrial Segment.
(c) Includes results for the former Harsco Industrial Segment for the period from January 1, 2019 to June 30, 2019.

The Company's management believes Adjusted operating income before acquisition amortization expense, which is a non-U.S. GAAP financial measure, is useful to investors because it provides an overall understanding of the Company's historical and future prospects. Exclusion of unusual items permits evaluation and comparison of results for the Company's core business operations, and it is on this basis that management internally assesses the Company's performance. Exclusion of acquisition-related intangible asset amortization expense, the amount of which can vary by the timing, size and nature of the Company's acquisitions, facilitates more consistent internal comparisons of operating results over time between the Company's newly acquired and long-held businesses, and comparisons with both acquisitive and non-acquisitive peer companies. It is important to note that such intangible assets contribute to revenue generation and that intangible asset amortization related to past acquisitions will recur in future periods until such intangible assets have been fully amortized. Inclusion of discontinued operations, which relate principally to the Harsco Industrial Segment, provides comparability to prior periods. This measure should be considered in addition to, rather than as a substitute for, other information provided in accordance with U.S. GAAP.

HARSCO

RECONCILIATION OF NON-GAAP MEASURES

HARSCO CORPORATION

RECONCILIATION OF FREE CASH FLOW BEFORE GROWTH CAPITAL EXPENDITURES TO NET CASH PROVIDED BY OPERATING ACTIVITIES (Unaudited)

(In thousands)	Three Months Ended September 30, 2019 2019	2018
Net cash provided by operating activities	$ 44,657	$ 48,315
Less capital expenditures	(55,870)	(34,806)
Less purchase of intangible assets	(721)	—
Plus capital expenditures for strategic ventures (a)	1,461	437
Plus total proceeds from sales of assets (b)	5,355	5,943
Plus transaction-related expenditures (c)	10,390	—
Free cash flow	5,272	19,889
Add growth capital expenditures	25,587	6,875
Free cash flow before growth capital expenditures	$ 30,859	$ 26,764

(a) Capital expenditures for strategic ventures represent the partner's share of capital expenditures in certain ventures consolidated in the Company's financial statements.
(b) Asset sales are a normal part of the business model, primarily for the Harsco Environmental Segment.
(c) Expenditures directly related to the Company's acquisition and divestiture transactions.

The Company's management believes that Free cash flow before growth capital expenditures, which is a non-U.S. GAAP financial measure, is meaningful to investors because management reviews cash flows generated from operations less capital expenditures net of asset sales proceeds and transaction-related expenditures for planning and performance evaluation purposes. The Company's management also believes that free cash flow before growth capital expenditures, which is a non-U.S. GAAP financial measure, is meaningful to investors because management uses this as a key factor in the deployment of capital for strategic planning purposes. It is important to note that free cash flow and free cash flow before growth capital expenditures do not represent the total residual cash flow available for discretionary expenditures since other non-discretionary expenditures, such as mandatory debt service requirements and settlements of foreign currency forward exchange contracts, are not deducted from these measures. These measures should be considered in addition to, rather than as a substitute for, other information provided in accordance with U.S. GAAP.

HARSCO

RECONCILIATION OF NON-GAAP MEASURES

HARSCO CORPORATION

RECONCILIATION OF FREE CASH FLOW AND FREE CASH FLOW BEFORE GROWTH CAPITAL EXPENDITURES TO NET CASH PROVIDED BY OPERATING ACTIVITIES
(Unaudited)

	Twelve Months Ended December 31	
(In thousands)	**2018**	**2017**
Net cash used by operating activities	**$ 192,022**	$ 176,892
Less capital expenditures	**(132,168)**	(98,314)
Plus capital expenditures for strategic ventures (a)	**1,595**	865
Plus total proceeds from sales of assets (b)	**11,887**	13,418
Free cash flow	**73,336**	92,861
Add growth capital expenditures	**30,655**	16,465
Free cash flow before growth capital expenditures	**$ 103,991**	$ 109,326

(a) Capital expenditures for strategic ventures represent the partner's share of capital expenditures in certain ventures consolidated in the Company's financial statements.
(b) Asset sales are a normal part of the business model, primarily for the Harsco Environmental Segment.

The Company's management believes that free cash flow, which is a non-U.S. GAAP financial measure, is meaningful to investors because management reviews cash flows generated from operations less capital expenditures net of asset sales proceeds for planning and performance evaluation purposes. The Company's management also believes that free cash flow before growth capital expenditures, which is a non-U.S. GAAP financial measure, is meaningful to investors because management uses this as a key factor in the deployment of capital for strategic planning purposes. It is important to note that free cash flow and free cash flow before growth capital expenditures do not represent the total residual cash flow available for discretionary expenditures since other non-discretionary expenditures, such as mandatory debt service requirements and settlements of foreign currency forward exchange contracts, are not deducted from these measures. These measures should be considered in addition to, rather than as a substitute for, other information provided in accordance with U.S. GAAP.

RECONCILIATION OF NON-GAAP MEASURES

HARSCO CORPORATION

RECONCILIATION OF FREE CASH FLOW AND FREE CASH FLOW BEFORE GROWTH CAPITAL EXPENDITURES TO NET CASH PROVIDED BY OPERATING ACTIVITIES
(Unaudited)

(In thousands)	Twelve Months Ended December 31 2016
Net cash provided by operating activities	$ 159,876
Less capital expenditures	(69,340)
Plus capital expenditures for strategic ventures (a)	170
Plus total proceeds from sales of assets (b)	9,305
Free cash flow	100,011
Add growth capital expenditures	9,868
Free cash flow before growth capital expenditures	$ 109,879

a) Capital expenditures for strategic ventures represent the partner's share of capital expenditures in certain ventures consolidated in the Company's financial statements.
b) Asset sales are a normal part of the business model, primarily for the Harsco Environmental Segment.

The Company's management believes that free cash flow, which is a non-U.S. GAAP financial measure, is meaningful to investors because management reviews cash flows generated from operations less capital expenditures net of asset sales proceeds for planning and performance evaluation purposes. The Company's management also believes that free cash flow before growth capital expenditures, which is a non-U.S. GAAP financial measure, is meaningful to investors because management uses this as a key factor in the deployment of capital for strategic planning purposes. It is important to note that free cash flow and free cash flow before growth capital expenditures do not represent the total residual cash flow available for discretionary expenditures since other non-discretionary expenditures, such as mandatory debt service requirements and settlements of foreign currency forward exchange contracts, are not deducted from these measures. These measures should be considered in addition to, rather than as a substitute for, other information provided in accordance with U.S. GAAP.

RECONCILIATION OF NON-GAAP MEASURES

HARSCO CORPORATION

RECONCILIATION OF CASH FLOW BEFORE GROWTH CAPITAL EXPENDITURES TO NET CASH PROVIDED BY OPERATING ACTIVITIES (Unaudited)

(In millions)	Projected Twelve Months Ending December 31 2019 Low	
	Low	**High**
Net cash provided by operating activities	$ 184	$ 204
Less capital expenditures	(186)	(194)
Plus total proceeds from asset sales and capital expenditures for strategic ventures	16	14
Transaction related expenses	26	26
Free cash flow	40	50
Add growth capital expenditures	80	80
Free cash flow before growth capital expenditures	$ 120	$ 130

The Company's management believes that Free cash flow before growth capital expenditures, which is a non-U.S. GAAP financial measure, is meaningful to investors because management reviews cash flows generated from operations less capital expenditures net of asset sales proceeds and transaction-related expenditures for planning and performance evaluation purposes. The Company's management also believes that free cash flow before growth capital expenditures, which is a non-U.S. GAAP financial measure, is meaningful to investors because management uses this as a key factor in the deployment of capital for strategic planning purposes. It is important to note that free cash flow and free cash flow before growth capital expenditures do not represent the total residual cash flow available for discretionary expenditures since other non-discretionary expenditures, such as mandatory debt service requirements and settlements of foreign currency forward exchange contracts, are not deducted from these measures. These measures should be considered in addition to, rather than as a substitute for, other information provided in accordance with U.S. GAAP.

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RECONCILIATION OF NON-GAAP MEASURES

HARSCO CORPORATION

RECONCILIATION OF RETURN ON INVESTED CAPITAL TO NET INCOME AS REPORTED (a) (Unaudited)

(In thousands)	Trailing Twelve Months for Period Ended September 30, 2019
Net income as reported	$ 519,397
Gain on sale of discontinued business	(527,980)
Corporate strategic costs	17,872
Transaction-related costs for discontinued operations	8,263
Harsco Environmental Segment change in fair value to contingent consideration liability	(7,767)
Unused debt commitment and amendment fees; and loss on early extinguishment of debt	7,435
Harsco Environmental Segment provision for doubtful accounts	6,174
Loss on extinguishment of debt in discontinued operations	5,314
Harsco Rail Segment improvement initiative costs	5,285
Harsco Environmental Segment site exit related	(2,427)
Harsco Clean Earth Segment severance costs	1,254
Taxes on above unusual items (b)	102,899
Impact of U.S. tax reform on income tax benefit	(15,409)
Deferred tax asset valuation allowance adjustment	(465)
Net income from continuing operations, as adjusted	119,845
After-tax interest expense (c)	25,669
Net operating profit after tax as adjusted	$ 145,514
Average equity	$ 431,499
Plus average debt	733,341
Average capital	$ 1,164,840
Return on invested capital	12.5%

a) Return on invested capital excluding unusual items is net income (loss) excluding unusual items, and after-tax interest expense, divided by average capital for the year. The Company uses a trailing twelve month average for computing average capital.

b) Unusual items are tax-effected at the global effective tax rate, before discrete items, in effect at the time the unusual item is recorded except for unusual items from countries where no tax benefit can be realized, in which case a zero percent tax rate is used.

c) The Company's effective tax rate approximated 23% for the trailing twelve months for the period ended September 30, 2019

The Company's management believes Return on invested capital, which is a non-U.S. GAAP financial measure, is meaningful in evaluating the efficiency and effectiveness of the capital invested in the Company's business. Exclusion of unusual items permits evaluation and comparison of results for the Company's core business operations, and it is on this basis that management internally assesses the Company's performance. This measure should be considered in addition to, rather than as a substitute for, net income or other information provided in accordance with U.S. GAAP.