



# CFA Institute

---

## CFA Institute Research Challenge

hosted by

### Southwest U.S. Research Challenge

### University of Texas at Dallas

---

The CFA Institute Research Challenge is a global competition that tests the equity research and valuation, investment report writing, and presentation skills of university students. The following report was prepared in compliance with the Official Rules of the CFA Institute Research Challenge, is submitted by a team of university students as part of this annual educational initiative and should not be considered a professional report.

### **Disclosures:**

#### **Ownership and material conflicts of interest**

The author(s), or a member of their household, of this report does not hold a financial interest in the securities of this company. The author(s), or a member of their household, of this report does not know of the existence of any conflicts of interest that might bias the content or publication of this report.

#### **Receipt of compensation**

Compensation of the author(s) of this report is not based on investment banking revenue.

#### **Position as an officer or a director**

The author(s), or a member of their household, does not serve as an officer, director, or advisory board member of the subject company.

#### **Market making**

The author(s) does not act as a market maker in the subject company's securities.

#### **Disclaimer**

The information set forth herein has been obtained or derived from sources generally available to the public and believed by the author(s) to be reliable, but the author(s) does not make any representation or warranty, express or implied, as to its accuracy or completeness. The information is not intended to be used as the basis of any investment decisions by any person or entity. This information does not constitute investment advice, nor is it an offer or a solicitation of an offer to buy or sell any security. This report should not be considered to be a recommendation by any individual affiliated with CFA Societies Texas, CFA Society Louisiana, CFA Institute, or the CFA Institute Research Challenge with regard to this company's stock.

Ticker: CECE



Recommendation: BUY

Target Price: \$8.67 (37.4% upside)

Date: Valuation as of 1/31/2022

Industry: Environmental  
and Facilities Services

Exchange: NASDAQ

## Investment Recommendation

We issue a BUY rating for CECO Environmental Corp. with a 12-month target price of \$8.67, showing a 37.4% upside. Our valuation is based on a public comparables analysis, FCFE, and FCFE analysis.

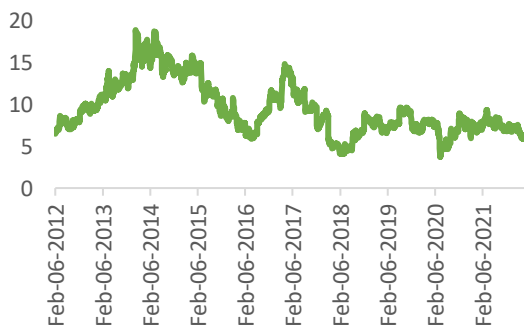
### Company Snapshot

Market Capitalization	223.81
Recent price (01.31.2022)	\$6.31
52 -Week range	\$5.77 - \$9.47
ROA	1.95%
ROE	1.11%
Forward P/E	10.25
Dividend Yield	0
EPS (TTM)	\$0.06
EV/EBITDA (TTM)	14.79
Beta (5Y Monthly)	1.20
Price/Book (TTM)	1.12

### Industry Trends

CECO is well positioned to take advantage of the global trend towards cleaner energy and renewables, especially natural gas. As power generation becomes more environmentally conscious, new facilities are being constructed to use cleaner fuels. In developed markets, natural gas is becoming more widespread. This provides an opportunity for growth as CECO provides product solutions throughout the entire natural gas infrastructure. In addition, the Company's global presence allows CECO to take advantage of both emerging and developed markets. The increased air pollutant standards in the emerging markets and the greater emissions released by developed markets both are avenues for CECO to generate growth.

### Historical Price Performance



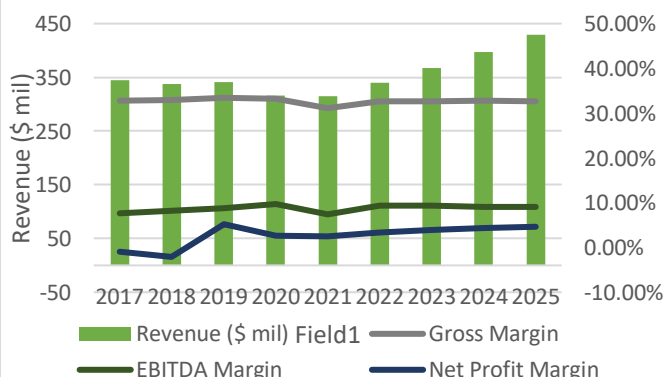
### Efficient Operations for Customer Satisfaction

CECO operates to satisfy customers based on the unique business model the Company utilizes. This model ensures an understanding of the customers goals to provide them with the most appropriate solution. These solutions include air quality control and customized engineer solutions for customers. This premium placed on outcome allows CECO to meet customer requirements while continuing growth

### Mergers and Acquisitions

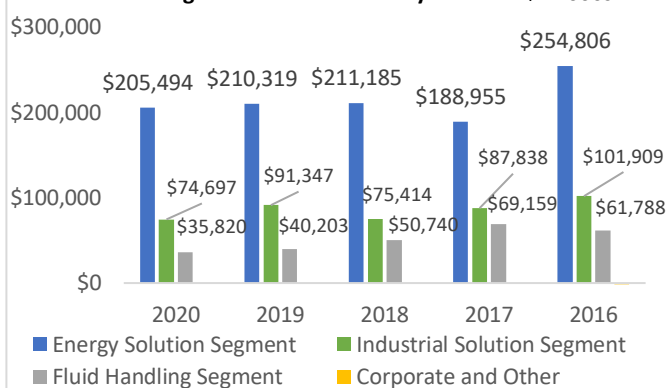
CECO has continued to strive to grow our products and customer solutions. In June 2020, the Company acquired Environmental Integrated Solutions (EIS) to complement the Industrial Solutions segment. EIS develops engineering products to clean air with air pollutant control solutions and was responsible for \$15.8 million in revenue for 2020. Recently, in January 2022, CECO acquired General Rubber LLC (GBR), a leader in producing rubber expansion joints and flow control. These acquisitions reinforce CECO's commitment to growth as it looks to expand its offered product solutions.

### Financial Summary



## Company Overview

**Segmented Revenue Analysis**



CECO Environmental (“CECE” or “the Company”) was founded in 1966 and operates as a global leader in industrial air quality and fluid handling. The company serves the energy, industrial and other niche markets. The company focuses on engineering, designing, building, and installing systems that capture, clean and destroy airborne contaminants from industrial facilities. The company also produces equipment that controls emissions from such facilities using fluid handling and filtration systems. These services are provided to various industries including power generation, petrochemical processing, heavy, medium, and light industrial, petrochemical refining, oil & gas, electric vehicle production, poly silicon fabrication, battery recycling, and wastewater treatment.

As of December 2020, CECO had over \$6 billion equipment installed on their customer’s locations, and they continue to target expansion by enhancing their recurring revenues from aftermarket products and services.

## Company Growth Drivers and Differentiators

The Company continues to pursue a growth strategy by undertaking several initiatives to ensure positive customer experience and further innovation. These factors allow for CECO to maintain an edge over competition as a global leader within the pollutant space.

### Four value creation enablers driving growth

#### Outside-in Leadership

The Outside-in Leadership growth strategy reinforces CECO’s commitment to customer satisfaction through increased attention and awareness of trends affecting the global markets. This was strategy proved effective during the pandemic because the Company was able to prudently and effectively combat the turmoil that occurred during these two years.

#### Innovation

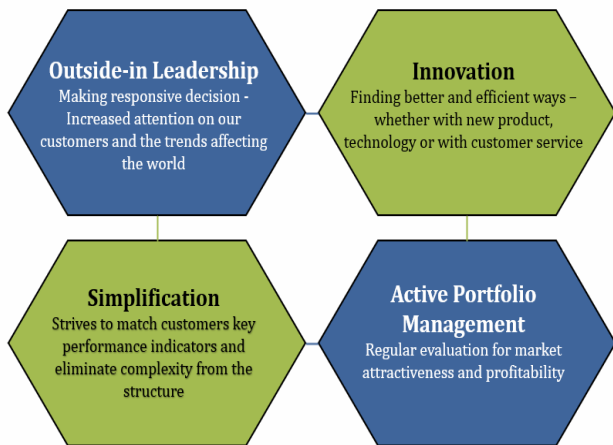
This growth strategy supports CECO’s commitment to serve their customers with new product development through an active investment in R&D

#### Simplification

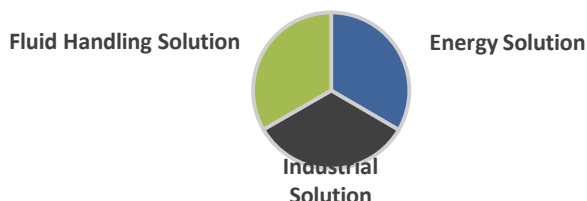
By focusing on the Simplification strategy CECO strives to make their operations simpler and more custom tailored for their customer’s needs, which allows CECO to be able to match customer requirements and preferences.

#### Active Portfolio Management

A consistent evaluation of investing units allows CECO to be best prepared for the long-term outlook of the Company



**Business Segment**



## CECO’s Business Segments

**Fluid Handling Solution Segment** – The Fluid Handling Solution Segment provides unique filtration solutions to maintain clean and safe operations in extremely harsh and toxic environments

**Industrial Solution Segment** – The company addresses the growing need to protect clean air and upgrade the sustainability index beyond carbon footprint issues through its industrial solution segments which serves the air pollution market

**Energy solution segment** – The Energy solution segment plays a key part in helping meet the global demand for clean energy and lower emissions through highly engineered and tailored emissions management, silencers and separation solutions and services.

## Environmental, Social, and Governance

Executives			
Name	Title	Board	Age
Todd Gleason	CEO	✓	49
Matthew Eckl	CFO	✓	40
Paul Gohr	CAO		39



## Industry Overview

Properties			Location of Facilities	
Segment	Owned	Leased	States	Countries
Energy Segment Solutions	-	12	California, Connecticut, New York, Ohio, Texas	United States, Netherlands, Canada, India, UAE, Singapore, United Kingdom, People's Republic of China
Industrial Solution Segment	-	8	California, Illinois, Michigan, North Carolina, Pennsylvania, Tennessee	United States, United Kingdom, People's Republic of China
Fluid Handling Solution Segment	1	2	Indiana, Pennsylvania	United States, Netherlands
Corporate	-	2	Ohio, Texas	United States
<b>Total</b>	<b>1</b>	<b>24</b>		

The global commercial service industry has grown from \$3858.88 billion in 2020 to \$4366.32 billion at a compound annual growth rate of (CAGR) of 13.1%. The industry is further divided into 5 other subindustries such as Environmental & Facilities Services, Diversified Support Services, Office Services & Supplies, Commercial Printing and Security & Alarm Services. The market capital from the Environmental & Facilities Services is at \$143.9.

The industry has been on a constant upward growth rate throughout the decade. The revenue is forecasted at a growth rate of 11.8% in 2021, followed by 6.3% growth in 2022 for the Environmental & Facilities Services.

### Industry Growth Drivers

#### Diverse end market exposure

Environmental services are integral to companies operating in the largest markets of the U.S. economy. While demand for services varies across water, air, and solid and hazardous waste disposal, each is critical to maintaining regulatory and market driven ESG compliance.

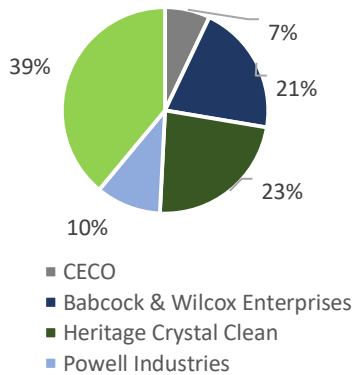
#### Strong regulatory and investor-driven tailwinds

The industry is supported by a robust framework of environmental regulations, in addition to growing investor appetite for firms that are environmentally and socially responsible.

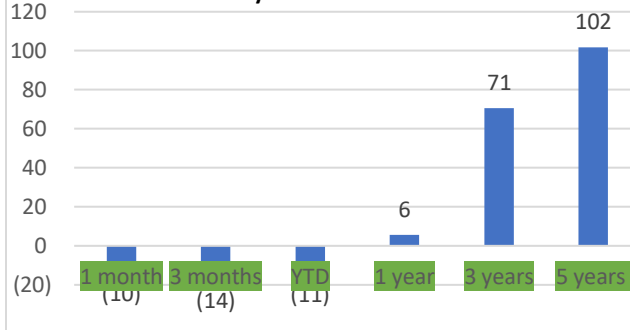
#### Fragmented market landscape

The environmental services & facilities market remains fragmented, with market participants ranging from highly specialized technical players to diversified national players offering a large suite of complementary services

**Industry Market Share**



**Industry Performance - Total return**



**Industry Earnings**

	Industry	IVV(iShares-SP500)
PE (F1)	27.92	19.23
PEG (Ratio)	1.50	1.91
Proj EPS Growth	23.06%	10.25%
Hist EPS Growth	10.90%	10.02%
Net Margin	4.14%	13.18%
Hist Sales Growth	6.84%	4.88%
Hist Dividend Growth	0.00%	4.35%

## Sustained acquisition appetite among strategic and financial buyers

There is a highly active group of sponsor-backed strategic acquirers, plus significant M&A activity in the sector.

## Industry Risk Factors

### Exposure and Risk

Given the type of industry, the health of the employees working around the hazardous conditions poses a major concern. Any miss in following diligent safety measures could pose a major risk to the industry. Taking care of the employees and their health is at a high risk as well

### High Barriers to Enter

A potential new entrant would need to obtain proper permits and prove adherence to environmental regulation to begin competing with the big public firms and local municipalities. Ever-changing regulations and standards make it challenging for new firms to get a foot in the door. Both waste collection and landfill operations are protected by barriers, such as service contracts, landfill use approval, and municipal agreements. Fixed costs are also quite high.

## Volatility of oil and natural gas prices can adversely affect demand for the products and services

Volatility in oil and natural gas prices can impact customers' activity levels and spending for the products and services. The COVID-19 pandemic has significantly disrupted demand for and expectations about future prices and price volatility, which are important for determining customers future spending levels. Lower oil and natural gas prices generally lead to decreased spending by the clients. While higher oil and natural gas prices generally lead to increased spending by customers, sustained high energy prices can be an impediment to economic growth, and can therefore negatively impact spending by customers.

## Competitive Positioning

### Advanced and innovative environmental technologies

CECO provides engineered solutions that contribute to helping meet the global demand for environmental protection. Its technologies improve air quality, recycle catalyst, and abate noise pollution. With the introduction of Advanced Analytical Services and Training (AAS), the Company has increased its capabilities by offering a wide range of services which include system design, integration, and fabrication. AAS is also equipped to troubleshoot, test, and confirm analyzers.

Over the decades, the Company has proven to improve the operational efficiency by delivering quality engineering and technology solutions. In 2021, CECO was awarded a \$3.3 M contract to provide end-to-end environmental solutions to a global semiconductor chip maker because CECO was able to provide an end-to-end solution which reduces the burden of contacting multiple vendors. Their sustainable margin expansion demonstrates the Company is flexible with meeting the custom needs by providing innovative technologies and application expertise. Their workforce includes

more than 200 engineers, designers, and project managers whose expertise helps the company gain a deeper understanding of the solutions they offered.

### Single-source provider through solutions-based selling

Pollution related risks and rigorous government regulations has compelled the company to provide relevant solutions by starting the buying process early when compared to its competitors. The company serves diverse global industries and is differentiated by reliable product performance, timely delivery, and customer satisfaction. According to January 10, 2022, CECO environmental report, the company intends to acquire industrial flow control leader GRC. This acquisition will expand the market size of CECO by \$300 M and could make it a market leader. CECO has a diversified customer base of approximately 4800 active customers across industries as of December 31, 2019. Moreover, CECO is mostly offering a repetitive service

## Porters five forces Competitive analysis

### Competition – **High**

The company sells products in industries that are highly competitive. It operates in mature industries which have existed in the market longer than CECO Environmental. CECO competes with the regional and national manufacturers in every line of their services. Some of their competitors also have more financial resources than the Company

### Threats of new entrants - **Low**

It is less likely for new entrants to enter an industry where established players like CECO Environmental define standards. This industry requires enormous funding in research & development. This ongoing financial investment required to maintain in the market keeps smaller entrants from disrupting the space. It is crucial for the company to build economies of scale to reduce fixed cost per unit which is more difficult in the shorter run. Hence, new emerging companies pose a lower threat. No single company competes with CECO across its full range of products because the markets they serve are highly fragmented.

### Threat of substitutes – **High**

Threat of substitutes is high as there are large players in the market. CECO Environmental must constantly invest in R&D to drive their business with an understanding of the needs of their customers. The company also needs to be very responsive to the customized solutions needed by their customers. Any project failure by the company could significantly impact their customer base.

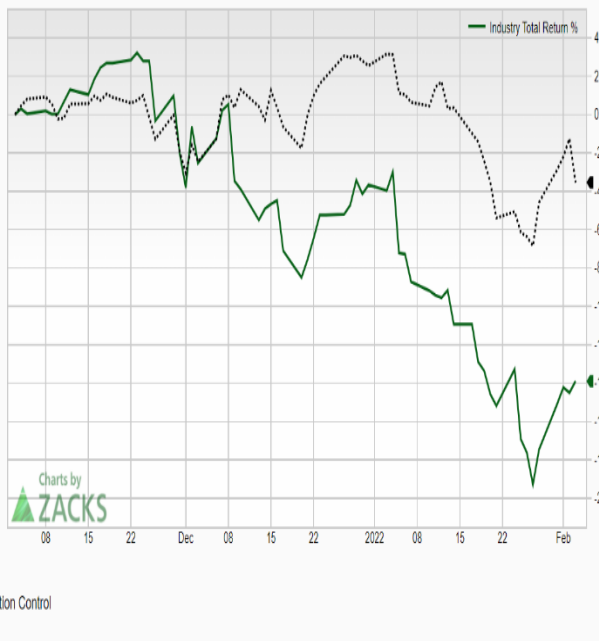
### Bargaining power of customers – **Low**

The company is not dependent on a single customer and hence the bargaining power of customers is low. The loss of any one customer does not have a materially adverse effect on the company. However, to excel in the market and become a market leader, it is crucial for the company to fulfil the customized needs of the customers

### Bargaining power of suppliers – **Medium**

CECO has established relationship with suppliers to purchase raw materials on credit and then make payment once the company has been paid by their customers. CECO purchases raw material from a variety of global sources when the contract terms are favorable to the firm. If a particular supplier is unable to provide raw materials in accordance with the company's terms, there are other suppliers in the market available.

**Pollution Control Industry performance -  
3 months**





The company is dependent on the third-party suppliers to supply its raw materials and component parts. Although it is not dependent on any one supplier, the third-party suppliers could experience financial distress or their own sourcing problems that could impact CECO's supply chain

## Investment Summary

---

### *Pros of Recommendation*

#### **Shift toward cleaner sources**

As time passes, CECO is positioned to be major player within the air pollutant space. With a clear shift towards cleaner energy, the Company's industrial diversity allows it to pivot into different ventures while mitigating impacts to its various industries. The global trend is moving towards building new facilities that use cleaner fuels, predominately natural gas. CECO is a leading global supplier of products throughout the entire natural gas infrastructure and stand to benefit greatly through the increase in global natural gas production. In addition, the emerging global markets in Asia are increasing awareness of the necessity for air pollutant control. This provides an opportunity for CECO to continue growth outside of developed markets while continuing to provide exceptional product lines in Europe and America as well.

#### **Acquisition of GRC**

On January 10, 2022, CECO announced the acquisition of GRC for \$24 million. This purchase was accomplished through a combination of debt, cash, and equity. GRC is responsible for rubber manufacturing, had a revenue of over \$12 million in 2021 and maintained an above average EBITDA and cash flows throughout 2021. This acquisition will allow the Company to continue its growth into new industries in a positive way.

### *Cons of Recommendation*

#### **Covid-19**

In November of 2019, a new strain of coronavirus emerged from China. Over the past two years, Covid has affected company operations in a negative way. This has resulted in decreased revenues year over year due to cutbacks within our customer base. Although the development of the vaccine has been a step in a positive direction, the emergence of new strains still presents a substantial amount of uncertainty. The long-term effects of the pandemic on Company operations have yet to be determined but this uncertainty does present a general risk.

#### **Inflation**

Due to government spending and stimulus over the past two years, inflation has reached 7% year over year according to the Consumer Price Index. When inflation rises, the cost of goods can increase as well, leading to a decrease in revenues and overall profitability. Another effect of increased inflation is the increase in interest rates. Higher interest rates can significantly affect growth stocks on a macroeconomic level due to lower cash flows. CECO recognizes inflation as having the potential to disrupt operations further which can have a negative effect on the stock price. However, by expanding into more industries, the Company is confident it can remain a global leader of air pollutant products

## Financial Analysis

### *Drivers*

#### **Revenue Drivers**

CECO generates revenue through its engineered systems segment and industrial process solutions segment. These segments account for 56.4% and 43.6% of total sales respectively. In TTM 2021, net sales have decreased 1.1% and gross profit has decreased 8.4% compared to 2020. These can be primarily attributed to inflation and the effects of Covid upon global demand. However, orders booked in TTM 2021 have increased 33.5% compared to 2020. This signals a strong recovery for the Company moving forward

#### **Cost of Goods Sold**

In TTM 2021, CECO has a gross margin of 31.4% which is in line with the industry average. The two business segments, engineered systems and industrial process solutions, have margins of 27.1% and 36.9%. In the first quarter of 2021, the Company merged the fluid handling and industrial segments into the industrial process solutions segment to better meet organizational objectives. As CECO continues to recover from the pandemic, these margins may increase due to normalization of global business activities.

#### **Operating Expenses Drivers**

In TTM 2021, CECO generated an operating margin of 2.0%. This has fallen from 4.2% in 2020 due to factors resulting from the pandemic. The Company's largest operating expenses are selling and administration costs which account for 26.4%. This is an increase from 2020 due to cost reduction measures implemented because of Covid that did not reoccur. As the Company continues to recover from the pandemic and given its historical operating margins, we project the operating margin to stabilize around 4.5%.

### *Ratio Analysis*

#### **Profitability Ratios**

Due to relief provided by the CARES Act, CECO was able to maintain relatively constant margins. Its gross margin increased from 33.1% in 2018 to 33.3% in 2020, showing the Company has managed to remain steady during the pandemic. The net profit margins increased from 3% in 2018 to 4.2% in 2020. As the Company continues to recover from the pandemic, these margins are expected to improve

#### **Liquidity Ratios**

Although the pandemic has created operational challenges, CECO has managed to maintain positive operating cash flows in 2020, although it decreased from 2019. The company has used cash to invest in property and acquisitions during 2020 resulting in a short-term liability. In 2020, the current ratio increased to 1.68x, demonstrating the Company can meet short term debt requirements. At the end of 2020, CECO had nearly \$36 million in cash on hand which can be used for future growth in both operating activities or future investment activities

#### **Leverage Ratios**

The Debt to EBITDA ratio is 2.05x, signifying the Company is very capable of meeting its general debt obligations even with long term debt of \$62 million. Given the amount of capital spent in investing activities and the company's solid debt ratio of 0.16, there is the possibility for a financing of new debt to fund further growth opportunities.



Ratios Output								
	CECO Environmental				Average Comps	Current Comparables Companies		
Ratios	2018	2019	2020	2021 TTM		WLMS	POWL	EPAC
Profitability Ratios								
Gross Margin	33.10%	33.40%	33.30%	31.40%		12.60%	15.90%	46%
Net Profit Margin	3.00%	5.30%	4.20%	2.00%		0.60%	0.13%	8.00%
ROA	-1.80%	4.40%	2.00%	0.30%		1.50%	0.14%	4.60%
ROE	-4.00%	9.20%	4.00%	0.59%		4.80%	2.10%	9.20%
Liquidity Ratios								
Current Ratio	1.55x	1.56x	1.68x	1.60x		1.53x	2.5x	2.65x
Quick Ratio	0.93x	0.90x	0.91x	0.86x		1.08x	2.2x	1.81x
Debt Utilization								
Debt-Equity	1.20x	1.12x	1.06x	1.07x		2.29x	0.45x	0.99x
Equity Multiplier	2.20x	2.12x	2.06x	2.07x	2.11x	3.29x	1.45x	1.99x
Asset Utilization								
Asset Turnover	0.86x	0.84x	0.75x	0.75x		2.56x	1.08x	0.64x
Inventory Turnover	10.8x	11.1x	12.2x	8.5x		16.3x	13.3x	3.79x
Dupont Analysis								
NPM	5.70%	9.40%	6.50%	3.11%		5.10%	0.20%	10.20%

## Valuation

### Cost of Equity

We used CAPM to calculate the cost of equity. We chose the 10-year Treasury as the risk-free rate which was yielding 1.8% as of January 2022. The market risk premium was derived as the geometric average difference in returns between stocks and bonds over the last 80 years. The beta of 1.54 was calculated by un-levering the betas of CECO's competitors and then re-levering the average unlevered beta based on CECO's capital structure.

### Cost of Debt

To arrive at the cost of debt, we took the weighted average of the yield to maturity on CECO's senior unsecured bonds. Tax rate was calculated based on the approximate tax rate for the firm.

### Target Price

To arrive at our target price, we used a weighted average of our various valuation methods. The resulting price target of \$8.67 gives us and under valuation of 37.3% (See Appendix A)

### Discounted Cash Flow Model

For our DCF, we used both a perpetual growth model and a terminal multiple. For the perpetual growth model, we assumed a growth rate of 2%; the team took a optimistic approach assuming the general industry would an increase in growth driven by the focus on environmentally-friendly practices in the public sector and lowering the CO2 emissions. For the multiple method, we used an EV/EBITDA multiple of 16x derived from comps and previous industry acquisitions. The team used WACC to discount the sum of the future unlevered cash flows and the terminal value to find the present value. Our FCFE analyses resulted in price targets of \$11.57 and \$8.17 for the terminal multiple and perpetual growth model, respectively.

### Free Cash Flow to Equity

For the FCFE, we used the cost of equity from the CAPM to discount our cash flows. Our FCFE derived a target price of \$6.11.

### Relative Valuation -Trading Multiples

In addition to the cash flow models, we looked at CECO's peers and where they trade relative to CECO. Our comps include mid-sized and large-sized industrial and Environmental and facilities services companies, and they were predominantly based in North America. We used an EV/EBITDA multiple for comparison, considering the differing capital structures and volatile net income figures across the peer set. From our relative valuation analysis, we arrived at a target price of \$9.22 derived from a median multiple of 16x

## Appendix A: Valuation Summary

CECO Valuation			
Methodology	Weight	Implied Share Price	Under/Over Valuation (%)
Public Comparables	25.0%	9.22	46.1%
Free Cash Flow to Equity	10.0%	6.11	-3.2%
DCF - Multiples Method	25.0%	11.57	83.4%
DCF - Terminal Growth	35.0%	8.17	29.5%
<b>Current Value</b>	<b>100.0%</b>	<b>8.67</b>	<b>37.4%</b>

## Appendix B: Free Cash Flow to Equity Analysis

Free Cash Flow To Equity Analysis						
(\$mm)	2021	2022	2023	2024	2025	2026
<b>Net Income</b>	1	9	12	16	18	22
(+) Depreciation & Amortization	11	10	9	9	8	9
(-) Changes in Net Working Capital	(1)	12	(4)	(12)	(2)	(7)
(-) Capital Expenditure	3	3	4	4	4	5
(+/-) Mandatory Debt Repayments	(12)	(19)	(15)	(16)	(12)	(12)
<b>Free Cash Flow To Equity</b>	<b>-1</b>	<b>-15</b>	<b>6</b>	<b>15</b>	<b>13</b>	<b>20</b>
<b>PV of FCFE</b>	<b>-1</b>	<b>-11</b>	<b>4</b>	<b>9</b>	<b>7</b>	<b>9</b>
Terminal Value						156
PV of Terminal Value						58
Equity Value						214
<b>Implied share price</b>						<b>6.11</b>
<b>Current Share Price</b>						<b>6.31</b>

## Appendix C: Public Comparable Analysis

Public Comparables Analysis											
Company Name	Market Data			Financial Data				Valuation			
	Price (\$/share)	Market Cap (\$M)	EV (\$M)	Sales (\$M)	EBITDA (\$M)	EBIT (\$M)	Earnings (\$M)	EV/Sales x	EV/EBITDA x	EV/EBIT x	P/E x
Babcock & Wilcox Enterprises	6.77	652	727	680	64	46	6	1.1x	11.4x	15.7x	16.6x
William Industrial Services	2.1	113	141	290	8	7	1	0.5x	18.5x	19.0x	80.7x
Heritage-Crystal Clean	28.61	734	740	478	91	67	48	1.5x	8.2x	11.0x	20.3x
Powell Industries	29.86	324	200	471	11	1	1	0.4x	17.5x	199.5x	57.6x
Enerpac Tool Group	17.85	1,235	1,322	528	80	58	38	2.5x	16.5x	22.8x	30.9x
<b>Average</b>								<b>1.2x</b>	<b>14.4x</b>	<b>53.6x</b>	<b>41.2x</b>
<b>Median</b>								<b>1.1x</b>	<b>16.5x</b>	<b>19.0x</b>	<b>30.9x</b>

## Appendix D: Free Cash Flow to Firm Analysis

Free Cash Flow to Firm Analysis						
Stub1						
(\$mm)	2021	2022	2023	2024	2025	2026
<b>Revenue</b>	<b>315</b>	<b>340</b>	<b>367</b>	<b>397</b>	<b>429</b>	<b>463</b>
(-) Cost of Products Sold	217	229	247	267	289	312
<b>Gross Profit</b>	<b>98</b>	<b>111</b>	<b>120</b>	<b>130</b>	<b>140</b>	<b>151</b>
(-) Operating Expenses	85	90	95	102	110	118
(+) Depreciation & Amortization	10	10	9	9	8	9
<b>EBITDA</b>	<b>23</b>	<b>32</b>	<b>34</b>	<b>36</b>	<b>39</b>	<b>42</b>
Margin (%)	7.2%	9.4%	9.3%	9.1%	9.1%	9.0%
Growth (%)		40.8%	6.3%	6.6%	7.0%	7.7%
(-) Depreciation & Amortization	(10)	(10)	(9)	(9)	(8)	(9)
(-) Tax Expense	(3)	(3)	(3)	(3)	(3)	(3)
<b>EBI</b>	<b>9</b>	<b>19</b>	<b>22</b>	<b>25</b>	<b>27</b>	<b>30</b>
(+) Depreciation & Amortization	10	10	9	9	8	9
(-) Change in Net Working Capital	(1)	12	(4)	(12)	(2)	(7)
(-) Capital Expenditures	3	3	4	4	4	5
<b>Unlevered Free Cash Flow</b>	<b>18</b>	<b>14</b>	<b>32</b>	<b>41</b>	<b>34</b>	<b>41</b>
Discount Rate (%)	11.6%	11.6%	11.6%	11.6%	11.6%	11.6%
<b>Discounted Free Cash flow</b>	<b>16</b>	<b>11</b>	<b>23</b>	<b>27</b>	<b>19</b>	<b>21</b>

Enterprise Value Calculation (Growth Rate Terminal Value)	
Sum of PV of Unlevered Free Cash flows	106
PV of Terminal Value	225
<b>Enterprise Value (Gordon Growth Method)</b>	<b>331</b>

Enterprise Value Calculation (Multiple Terminal Value)	
Exit Multiple	16x
Sum of PV of Unlevered Free Cash flows	106
PV of Terminal Value	344
<b>Enterprise Value (Multiple Terminal Value)</b>	<b>450</b>

Other Statistics and Assumptions	
Implied LTM EV/EBITDA Multiple	7.9x
Implied Share Price	8.17
Discount Rate (WACC)	11.67%
Terminal Growth Rate	2.00%

Other Statistics and Assumptions	
Implied LTM EV/EBITDA Multiple	10.7x
Implied Share Price	11.57
Discount Rate (WACC)	11.67%
Terminal Growth Rate	2.00%

## Appendix E: Income Statement

INCOME STATEMENT	Historical 2016	Historical 2017	Historical 2018	Historical 2019	Historical 2020	Historical 2021	Projected 2022	Projected 2023	Projected 2024	Projected 2025	Projected 2026
<b>Revenue</b>	417	345	337	342	316	315	340	367	397	429	463
<i>Growth (%)</i>	NA	-17%	-2%	1%	-8%	0%	8.0%	8.0%	8.0%	8.0%	8.0%
<b>Cost of Goods Sold</b>	281	232	226	228	211	217	229	247	267	289	312
<i>% Of Sales</i>	67.5%	67.2%	66.9%	66.6%	66.7%	69.0%	67.3%	67.3%	67.3%	67.3%	67.3%
<b>Gross Profit</b>	136	113	112	114	105	98	111	120	130	140	151
<i>% Of Sales</i>	32.5%	32.8%	33.1%	33.4%	33.3%	31.0%	32.7%	32.7%	32.7%	32.7%	32.7%
Selling General & Admin Exp.	83	89	87	86	77	78	83	89	96	104	112
<i>% Of Sales</i>	19.8%	25.8%	25.9%	25.2%	24.2%	24.8%	24.3%	24.30%	24.30%	24.30%	24.30%
Amort. of Goodwill and Intangibles	14	14	10	8	8	7	7	6	6	6	6
<i>% Of Sales</i>	3.36%	3.98%	2.87%	2.49%	2.41%	2.35%	2.9%	2.91%	2.91%	2.91%	2.91%
<b>Other Operating Exp., Total</b>	97	103	97	95	84	85	90	95	102	110	118
<b>Operating Income</b>	39	10	14	19	21	12	21	25	28	30	33
<b>Interest Expense</b>	8	7	7	5	4	3	6	5	5	5	5
Currency Exchange Gains (Loss)	0.7	0.1	0.7	0.9	1.3	1.3	0.8	0.9	1.0	1.0	1.0
Other Non-Operating Inc. (Exp.)	0.1	0.0	(1.1)	0.2	0.4	(1.8)	(0.4)	(0.4)	(0.5)	(0.4)	(0.5)
<b>EBT Excl. Unusual Items</b>	31	4	7	15	19	9	16	20	23	26	29
<b>EBT Incl. Unusual items</b>	(33)	1	3	13	12	4	12	15	19	20	25
Income Tax Expense	5.3	4.4	9.6	(4.4)	3.7	2.9	4	3	3	2	3
<b>Net Income</b>	<b>(38)</b>	<b>(3.06)</b>	<b>(7.04)</b>	<b>18</b>	<b>8</b>	<b>1</b>	<b>9</b>	<b>12</b>	<b>16</b>	<b>18</b>	<b>22</b>

## Appendix F: Balance Sheet

BALANCE SHEET	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
<b>Current Assets</b>											
Cash	45.8	29.9	43.7	35.6	36.0	31.9	41	40	42	50	62
Accounts Receivable	121.2	101.9	82.9	103.2	108.5	120.6	105	114	123	133	143
Inventory	21.5	21.0	20.8	20.6	17.3	18.6	20	21	23	25	27
Prepaid Expenses	13.6	10.8	10.1	9.9	11.5	12.2	11	12	13	14	15
Other Current Assets	10.9	10.4	3.3	10.2	10.1	6.4	9	8	8	9	8
<b>Total Current Assets</b>	<b>213</b>	<b>174</b>	<b>161</b>	<b>179</b>	<b>183</b>	<b>190</b>	<b>186</b>	<b>195</b>	<b>209</b>	<b>230</b>	<b>256</b>
<b>Fixed Assets</b>											
PP&E, Net of Accum. Depreciation	27	23	22	29	28	27	26	26	26	27	27
Long-term Investments	-	0.3	0.6	-	-	-	-	-	-	-	-
Goodwill	170.2	167.0	152.2	152.0	161.8	161.6	158.8	158.9	157.5	147.0	130.0
Other Intangibles	82.8	69.6	54.2	45.6	42.6	37.4	55.4	38.0	32.0	28.0	26.0
Accounts Receivable Long-Term	3.2	2.5	0.9	0.9	1.5	-	1.8	1.5	1.3	1.4	1.5
Deferred Charges, LT	2.3	1.6	1.7	1.8	2.3	3.1	1.2	2.0	2.0	2.1	2.1
<b>TOTAL ASSETS</b>	<b>499</b>	<b>438</b>	<b>393</b>	<b>409</b>	<b>419</b>	<b>419</b>	<b>429</b>	<b>421</b>	<b>428</b>	<b>436</b>	<b>442</b>
<b>Current Liabilities</b>											
Accounts Payable	59.0	45.4	52.0	48.8	55.9	59.7	53	57	62	67	72
Accrued Exp.	8.2	5.2	7.6	5.7	5.1	6.5	6	7	6	8	9
Short-term Borrowings	5.3	5.3	1.7	-	-	-	2	1	4	6	4
Cur. Port. of LT Debt	8.8	11.3	-	2.5	3.1	3.8	6	6	4	4	6
Cur. Port. of Leases	-	-	-	3.1	2.8	2.4	-	-	3	3	5
Cur. Income Taxes Payable	1.5	-	1.8	-	0.5	0.5	2	1	1	3	3
Unearned Revenue, Current	35.1	22.1	26.7	40.0	24.7	29.7	30	29	30	30	32
Other Current Liabilities	28.4	18.5	14.1	15.1	17.2	15.9	20	23	18	20	19
<b>Total Current Liabilities</b>	<b>146</b>	<b>108</b>	<b>104</b>	<b>115</b>	<b>109</b>	<b>118</b>	<b>119</b>	<b>124</b>	<b>128</b>	<b>142</b>	<b>150</b>
<b>Long Term Liabilities</b>											
Long-Term Debt	114.4	103.5	74.5	63.0	69.5	62.2	86	75	62	54	45
Long-Term Leases	-	-	-	18.5	16.1	8.9	-	-	15	15	20
Pension & Other Post-Retire. Benefits	11.1	9.5	8.8	8.9	9.7	9.5	-	-	-	-	-
Def. Tax Liability, Non-Cur.	13.0	10.2	8.8	5.9	7.0	7.2	10	9	12	12	12
Other Non-Current Liabilities	23.8	20.9	18.1	4.1	4.1	10.0	8.7	8.0	7.6	9.0	9.0
<b>TOTAL LIABILITIES</b>	<b>309</b>	<b>252</b>	<b>214</b>	<b>216</b>	<b>216</b>	<b>216</b>	<b>237</b>	<b>228</b>	<b>235</b>	<b>240</b>	<b>246</b>
<b>Equity</b>											
Common Stock	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
Additional Paid In Capital	244.9	248.2	251.4	253.9	255.3	257.5	252	253	254	254	254
Retained Earnings	(41.7)	(52.7)	(59.4)	(46.3)	(38.1)	(37.9)	(46.0)	(46.7)	(45.7)	(43.5)	(43.0)
Treasury Stock	(0.4)	(0.4)	(0.4)	(0.4)	(0.4)	(4.1)	(1.0)	(1.1)	(1.2)	(1.4)	(1.5)
Comprehensive Inc. and Other	(13.0)	(8.9)	(13.4)	(14.5)	(14.5)	(14.4)	(13.1)	(13.1)	(13.8)	(13.9)	(13.8)
<b>TOTAL EQUITY</b>	<b>190</b>	<b>187</b>	<b>179</b>	<b>193</b>	<b>203</b>	<b>201</b>	<b>192</b>	<b>192</b>	<b>193</b>	<b>196</b>	<b>196</b>
<b>TOTAL LIABILITIES &amp; EQUITY</b>	<b>499</b>	<b>438</b>	<b>393</b>	<b>409</b>	<b>419</b>	<b>419</b>	<b>429</b>	<b>421</b>	<b>428</b>	<b>436</b>	<b>442</b>

<b>BALANCE SHEET ASSUMPTIONS</b>											
AR Days	106	108	90	110	125	140	113	113	113	113	113
Inventory Days	28	33	34	33	30	31	31	31	31	31	31
Prepaid Expenses (% of COGS)	4.8%	4.6%	4.5%	4.3%	5.5%	5.6%	4.9%	4.9%	4.9%	4.9%	4.9%
AP Days	76	71	84	78	97	100	85	85	85	85	85



## Appendix G: Cash Flow Statement

CASH FLOW STATEMENT	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
<b>CASH FLOW FROM OPERATING ACTIVITIES</b>											
Net Income	(38)	(3)	(7)	18	8	1	9	12	16	18	22
<b>Add Back Non-Cash Items</b>											
Depreciation & Amort.	5.0	4.6	3.7	2.1	2.5	3.1	3	3	3	3	3
Amort. of Goodwill and Intangibles	14	14	10	8	8	7	7	6	6	6	6
<b>Depreciation &amp; Amort., Total</b>	<b>19.0</b>	<b>18.3</b>	<b>13.4</b>	<b>10.6</b>	<b>10.1</b>	<b>10.5</b>	<b>10.5</b>	<b>9.2</b>	<b>8.5</b>	<b>8.4</b>	<b>8.5</b>
Other Amortization	1.1	1.0	1.1	1.1	0.4	0.4	0.9	0.8	0.8	0.7	0.7
(Gain) Loss on Sale of Assets	0.2	0.1	4.2	0.1	0.1	(0.1)	0.8	0.9	1.0	0.5	0.5
(Gain) Loss on Sale of Invest.	0.1	(0.3)	(0.3)	(0.2)	-	-	(0.2)	(0.3)	(0.3)	(0.2)	(0.2)
Asset Write-down & Restructuring Costs	57.9	7.9	0.3	-	0.9	0.9	2.5	1.1	1.3	1.3	1.4
Stock-Based Compensation	2.3	1.8	3.2	2.7	1.8	3.0	2.4	2.5	2.6	2.5	2.5
Tax Benefit from Stock Options	(0.1)	-	-	-	-	-	0	0	0	0	0
Provision & Write-off of Bad debts	0.8	3.9	1.4	0.3	0.9	0.8	1.3	1.4	1.0	1.0	1.1
Other Operating Activities	2.4	(19.4)	(1.9)	(1.2)	3.0	4.4	(2.1)	(2.9)	(0.1)	0.2	0.4
<b>Changes in Working Capital</b>											
Change in Acc. Receivable	15.8	20.3	(10.6)	(20.6)	(1.2)	(20.8)	15	(8.4)	(9.1)	(9.8)	(10.6)
Change In Inventories	9.4	0.9	(1.7)	(0.2)	4.4	(0.4)	(1.1)	(1.6)	(1.7)	(1.8)	(2.0)
Change in Acc. Payable	(6.6)	(15.8)	21.3	(4.0)	0.3	5.5	(6.6)	4.2	4.6	4.9	5.3
Change in Unearned Rev.	7.4	(15.2)	0.1	14.3	(17.6)	(0.2)	0.0	(0.9)	1.1	0.5	1.5
Change in Inc. Taxes	0.1	(1.8)	1.8	(1.7)	0.5	0.4	(0.1)	(0.1)	0.1	(0.2)	0.1
Change in Other Net Operating Assets	(2.0)	10.2	(3.1)	(8.6)	(7.1)	(0.4)	(1.8)	(1.8)	(3.8)	(3.9)	(3.1)
<b>Net Cash Provided by Operating Activities</b>	<b>69.8</b>	<b>8.9</b>	<b>22.1</b>	<b>10.2</b>	<b>4.6</b>	<b>5.2</b>	<b>30.1</b>	<b>16.3</b>	<b>21.6</b>	<b>22.5</b>	<b>27.8</b>
<b>CASH FLOW FROM INVESTING ACTIVITIES</b>											
Capital Expenditure	(1.1)	(1.0)	(3.1)	(5.7)	(3.9)	(2.8)	(3.0)	(4.0)	(4.0)	(4.0)	(5.0)
Sale of Property, Plant, and Equipment	0.7	0.4	6.3	0.5	0.6	0.5	1.5	1.6	1.8	1.1	1.2
Cash Acquisitions	-	-	-	-	(5.9)	0	-	-	-	-	-
Divestitures	-	-	35.1	-	-	-	-	-	-	-	-
Invest. in Marketable & Equity Secure.	-	-	-	-	-	-	-	-	-	-	-
Net (Inc.) Dec. in Loans Originated/Sold	-	-	-	-	-	-	-	-	-	-	-
Other Investing Activities	(1.0)	-	-	-	-	-	-	-	-	-	-
<b>Net Cash Used in Investing Activities</b>	<b>(1.4)</b>	<b>(0.6)</b>	<b>38.2</b>	<b>(5.2)</b>	<b>(9.2)</b>	<b>(2.3)</b>	<b>(1.5)</b>	<b>(2.4)</b>	<b>(2.2)</b>	<b>(2.9)</b>	<b>(3.8)</b>
<b>CASH FLOW FROM FINANCING ACTIVITIES</b>											
Total Debt Issued	14.2	2.3	11.3	45.3	96.0	41.1	35	39	45	50	51
Issuance of Common Stock	1.7	1.4	0.1	0.1	-	0.2	0.7	0.5	0.3	0.4	0.4
Repurchase of Common Stock	(0.2)	-	-	-	-	(3.7)	-	-	-	-	-
Total Debt Repaid	(55.6)	(11.9)	(56.3)	(56.4)	(92.3)	(52.6)	(54.2)	(53.9)	(61.0)	(61.7)	(62.6)
Total Dividends Paid	(9.0)	(7.8)	-	-	-	-	-	-	-	-	-
Other Financing Activities	(9.1)	(8.1)	-	(1.1)	-	(0.9)	(0.9)	(0.9)	(0.9)	(0.9)	(0.9)
<b>Net Cash Provided Used in Fn Act</b>	<b>(58.0)</b>	<b>(24.2)</b>	<b>(44.9)</b>	<b>(12.1)</b>	<b>3.7</b>	<b>(15.9)</b>	<b>(19.4)</b>	<b>(15.9)</b>	<b>(17.0)</b>	<b>(12.2)</b>	<b>(12.2)</b>
Foreign Exchange Rate Adj.	(1.7)	0.9	(1.5)	(0.4)	1.9	0.8	(0.0)	0.3	0.2	0.5	0.6
<b>Net Cash Flow</b>	<b>8.68</b>	<b>(15.06)</b>	<b>13.90</b>	<b>(7.49)</b>	<b>1.04</b>	<b>(12.22)</b>	<b>9.22</b>	<b>(1.62)</b>	<b>2.65</b>	<b>7.87</b>	<b>12.35</b>

