

Beaver Municipal Solutions

Municipally Controlled Corporation Due Diligence

October 2019



Executive Summary



High-Level Considerations

BMS's proposed operations align with regulations and industry comparables. There are few areas to address regarding their financial objectives and within the MGA requirements for Municipally Controlled Corporations.



Corporate & Governance Structure

BMS has not clearly identified what their corporate and governance structure will be as a Municipally Controlled Corporation. MNP recognizes that BMS is still in the planning stage of this process and have provided a number of best practices in this report to be considered in the finalizing of these structures, including the use of a qualified publicly appointed Board of Directors.



Market Landscape

BMS is well positioned in terms of maintaining current waste contracts, and their competitive position within the industry.



Financial Analysis

BMS is either in line with financial benchmarks or outperforming them. Over the past five years BMS has seen a decrease in revenue and margins and an increase in wages but still remain favourable compared to select industry benchmarks. It would be prudent for the foundation of the MCC to review the cost structure to ensure that costs do not further impact profitability. Assumptions made around the financial projections have been included in this report and appear reasonable based on the nature of the industry and BMS's current operations.



Pricing Analysis

BMS currently has a Present Value of Cash Flows to Invested Capital between \$53,200,000 and \$58,800,000. A sensitivity analysis has been included in this report identifying the impact of changing discount rates and terminal EBITDA margin.



High-Level Considerations

Review and commentary on the high-level strategic considerations that have driven the decision to form the MCC

Business Plan Review

The Alberta Municipal Government Act outlines twelve requirements of business plans for Municipally Controlled Corporations.

MGA MCC Business Plan Requirements	Addressed by BMS Business Plan (June 2019 version)	Location in BMS Business Plan	Comments
The services the corporation intends to provide	●	Section 1: Executive Summary	<i>Adequate summary provided</i>
The names of the shareholders of the corporation	●	Section 1: Major Players	<i>Complete</i>
The geographic locations in and outside Alberta in which the corporation intends to provide services	●	Section 1: Executive Summary	<i>Good summary provided</i>
Any potential environmental, financial, labour or other liability risk in controlling the corporation	●	Section 1: Implications or Risk Factors – Cost Drivers, and Confidential Appendix	<i>Risks are outlined and discussed in the business plan and the confidential appendix There is minimal discussion around liability risks</i>
Information demonstrating that the corporation will not be dependent on the shareholders for its ongoing operations	●	Sections 1, 2, and 3. (e.g., financial projections, other customers)	<i>BMS has outlined their operating plan throughout the business plan</i>
The impact of controlling the corporation on each municipality's financial viability	◐	Section 1 : Key Financial Goals	<i>Discussed briefly but not in direct relation to municipal financial forecasts / budgets</i>

Business Plan Review

The Alberta Municipal Government Act outlines twelve requirements of business plans for Municipally Controlled Corporations.

MGA MCC Business Plan Requirements	Addressed by BMS Business Plan (June 2019 version)	Location in BMS Business Plan	Comments
In the case of a corporation that intends to provide utility services, a projected rate structure	●	Schedule D: Fees	<i>A sufficient rate structure is included</i>
A market impact analysis if municipal control of the corporation would result in competition with similar services provided by the private sector	◐	Section 1: The Market Section 1: The Competition	<i>Highlights Competitors' Strengths and Market Advantage, but a thorough MIA is not evident</i>
Cashflow Projections for Next 3 Years of MCC Operation	●	Five Year Business Plan (2019-2023) Scenario Summary in Appendix	<i>Cashflow projections for 2019-2023 have been included</i>
Costs relating to establishing the MCC	○	Not included	<i>No discussion around costs directly related to establishing the MCC</i>
The value of assets that are to be transferred to the MCC	●	Schedule B – 3 Schedule B – 4	<i>The value of assets have been outlined in detail</i>
Financial statements for operating and capital budgets	●	Table 1.1 Summarized operating results (2014-2018) Table 1.2 Net Capital Expenditures (2014-2018) Schedule B – 3 (2019-2023) 5 Year Capital Program	<i>BMS provides financial statements within the business plan</i>

Financial Objectives – Commentary

The financial objectives from the BMS Strategic Plan Roadmap are:

1

No single customer providing more than 35% of total revenues by 2022

MNP Comments:

Based on the projected revenue streams (slide 30), BMS's largest customer, the City of Edmonton will be providing 30% of total revenues in 2022.

2

Regional landfill revenue being no more than 60% of total revenue by 2022

MNP Comments:

BMS will have to adjust their practices to achieve this goal. Management is aware of the importance for diversifying their revenue streams to encourage greater long-term sustainability and resiliency to changing market forces.

3

Minimum annual surplus distribution to members of \$2 million (with goal to increase)

MNP Comments:

BMS has projected \$2 million in surplus distribution for 2020, \$3 million for 2021, \$3.5 million for 2022 and 2023.

4

Continued subsidy of local waste management services

MNP Comments:

The business plan explains that from 2019-2023 rates to local residents and to member municipalities, will not change. BMS has held general disposal rates at current levels in the 5 year financial projections.



Corporate & Governance Structure

Review and commentary on the proposed corporate structure and cost/profit sharing of the MCC

Analysis of the appropriateness of the proposed governance structure given the needs and characteristics of the shareholders

Corporate Structure

Key Points

MGA s.75.3 states: "If there is a proposed material change to the business operations, including a change to its governance structure or the types of services offered, the council must notify the residents of the proposals and provide an opportunity for residents to make representations. MGA s.75.3

In the MCCR s.7, a material change is further defined as: "the information needed to be made available to the residents, associated timelines, and the engagement and reporting processes."

- *MNP Comment: This item should be codified in BMS Policy to ensure that residents and Council have the ability to review any proposed material changes to the MCC*

Municipal controlled corporations are regulated by the Municipal Government Act, Business Corporations Act, Control of Corporations Regulation, and the Debt Limit Regulation.

- *MNP Comment: Brownlee, LLP, a reputable Edmonton law-firm, is preparing MCC related legal documentation such that it is established in good-standing relative to all relevant regulations*

Proposed Corporate Structure



Corporate Structure

Key Questions

Will transitioning to an MCC be challenging?

- *MNP Comment: After more than 25 years as a Commission, BMS operations are well-established and there no reason to believe the ability to generate profit through a combination of a well-positioned main asset, diverse revenue streams, and cost-efficient operations will not continue into the future.*
- *MNP Comment: The experienced management team will be an asset in supporting the transition from Commission to MCC*

Is there precedent in the province for a waste management MCC?

- *MNP Comment: Once established as an MCC, BMS will be one of two MCCs in the province in the waste disposal business (Aquatera in the Grande Prairie area being the other)*
- *MNP Comment: Despite less than ideal precedence, the structure does appear to be appropriate for the nature of the business and the shareholder arrangement*

Are there any foreseeable issues with the proposed corporate structure [as illustrated to the right]?

- *MNP Comment: The proposed structure is clear and causes no concern in terms of role clarity, accountability, or authority*
- *MNP Comment: Maintaining the Commission makes sense, so long as its role is clearly delineated*

Proposed Corporate Structure



Governance Best Practices

- Directors of Crown corporations should be independent

Note: Independence' means a director is independent of management, does not have a material relationship with the corporation and, except for director fees, does not financially benefit from his or her relationship with the corporation.

- There should be limits around the appointment of public servants to Crown corporation Boards

- Boards should constitute an Audit Committee that ensures the integrity and adequacy of internal controls and standards of codes of conduct and ethics
- The Board should publicly report on corporation performance each year
- The Board should communicate regularly with government



- **9 Board Members**
- **No Municipal Elected Officials**
- Annual Retainer: \$10,000 for members, \$15,000 for Committee Chairs and \$20,000 for the Board Chair



- **9 Board Members**
- **No Municipal Elected Officials**
- Annual Retainer: \$78,300 for members, \$90,600 for Committee Chairs and \$177,200 for the Board Chair



- **11 Board Members**
- **No Municipal Elected Officials**
- Annual Retainer: \$3,000-\$6,000 for members, \$9,000 for Committee Chairs and \$150,000 for the Board Chair

Profit-Sharing Analysis

Based on 2016 Data

Municipality	Population	Surplus Received in 2016	Equal Distribution	Distribution by Population	Percent of Distribution by Population	Percent of Total Distribution	Percent of Total Population
Beaver County	5905	\$ 908,000	\$ 133,333	\$ 774,667	58%	45%	61%
Holden	350	\$ 185,000	\$ 133,333	\$ 51,667	4%	9%	4%
Ryley	483	\$ 201,000	\$ 133,333	\$ 67,667	5%	10%	5%
Viking	1039	\$ 275,000	\$ 133,333	\$ 141,667	11%	14%	11%
Tofield	1854	\$ 431,000	\$ 133,333	\$ 297,667	22%	22%	19%
	9631	\$ 2,000,000	\$ 666,667	\$ 1,333,333	100%	100%	100%

BMS profit-sharing rates are:

- *1/3 of distribution amount equally to the five municipalities*
- *2/3 based proportionally on population of the five municipalities*

The current percentage of total distributions is not equivalent to the percent of the population that each municipality holds

- *Beaver County is receiving 16% less than their population share*
- *Other municipalities are receiving 3-5% more than their population share*



Market Landscape

Review and commentary on the market landscape including existing and potential customers and competitors.

Waste Supply

Alberta generated 4.2 million tonnes of waste in 2016

- The average Canadian produces 720 kg of waste annually

Industry waste volumes are increasing

- Consumer spending and consumption, residential construction, and population are key drivers

The City of Edmonton is failing to reach residential waste diversion targets

- In 2017 the single unit residential diversion rate was 39%, they are aiming to achieve 80% diversion by 2022

There is a current halt on waste diversion efforts from the City of Edmonton

- Enerkem Biofuels and the Anaerobic Digestion Facility are still in commissioning
- The City of Edmonton's composting facility is closed for renovations

In 2016 86% of plastics in Canada were landfilled

- The Government of Canada is aiming to divert 75% of plastic waste by 2030

- *Despite the trends towards waste diversion initiatives, landfills will still be needed to manage the high supply of waste.*
- *The City of Edmonton's landfill waste supply is predicted to decrease upon the operations of Enerkem Biofuels and the Anaerobic Digestion Facility, but increasing construction within the area will help to maintain waste supply.*

Key Market Advantages and Risks of BMS

Advantages

BMS is primely located to two main highways as well as a major rail line. This allows them access to large waste suppliers such as the City of Edmonton, Town of Vermilion, and potential new opportunities with distant customers such as the greater Vancouver area.

BMS's landfill is approximately one hour away from the City of Edmonton, and has established relations with the municipality as well as secured contracts for their waste supply. BMS is the City of Edmonton's primarily waste disposal facility.

BMS offers competitive rates and additional waste hauling services which allows them to secure large, long-term contracts.

BMS's landfill has a potential 136 year lifespan from 2019, this would rely on neighbouring lands owned by BMS to be utilized.

Risks

BMS currently relies heavily on the City of Edmonton for their waste supply (61%). This poses a risk for future operations as BMS is receiving this waste on a contract to contract basis.

The five year projections developed are speculative and rely on the assumptions that customers such as the City of Edmonton will continue to use BMS's services for both municipal solid waste and construction waste. [see Financial Projections section]

Management is actively seeking to mitigate these risks and has strategies in places that will promote resiliency and diversification of clients and services.



Financial Analysis

Review and commentary on the financial projections

Projected Revenue Streams

Analysis of Reasonability

City of Edmonton (MSW & Hauling) 

- Projections are based on existing CoE Disposal Contract (to 2027) tonnages and historical figures multiplied by average unit price
- Appears to be a conservative estimate given state of CoE capacity
- Excludes existing Hauling Contract (zero margin)

2019-23:	\$10.8MM	\$9.4MM	\$7.9MM	\$6.4MM	\$6.5MM
-----------------	-----------------	----------------	----------------	----------------	----------------

Contaminated Soil 

- Projections are based on historical figures and include some variability to reflect general volatility evident over the years
- Expecting more LRT construction in near-term to maintain / increase levels

2019-23:	\$1.6MM	\$1.5MM	\$2.0MM	\$2.0MM	\$2.0MM
-----------------	----------------	----------------	----------------	----------------	----------------

Construction & Demolition (new) 

- Facility west of Edmonton is gradually shutting down
- Increasing revenue based on BMS capturing this business

2019-23:	\$1.3MM	\$3.9MM	\$3.9MM	\$4.2MM	\$4.5MM
-----------------	----------------	----------------	----------------	----------------	----------------

Special Waste 

- Includes hydrovac, chemical industrial, non-hazardous, asbestos
- Estimates appears to be reasonably conservative given limited number of facilities that can handle this type of waste

2019-23:	\$2.3MM	\$2.3MM	\$2.5MM	\$3.0MM	\$3.0MM
-----------------	----------------	----------------	----------------	----------------	----------------

Other MSW 

- Held at historical levels but with anticipated bump in 2022 from GFL
- Otherwise only includes existing non-CoE MSW (Parkland, Vermilion, etc.)

2019-23:	\$2.2MM	\$2.2MM	\$2.2MM	\$3.2MM	\$3.2MM
-----------------	----------------	----------------	----------------	----------------	----------------

New 

- Based on ability to capture alternative daily cover from CoE (i.e., waste diversion), new MSW (e.g., Strathcona County), new C&D, Waste Connections
- Excludes potential Vancouver rail waste

2019-23:	\$0.4MM	\$1.5MM	\$2.3MM	\$2.3MM	\$2.3MM
-----------------	----------------	----------------	----------------	----------------	----------------

Legend:

-  Absolutely Reasonable
-  Fairly Reasonable
-  Somewhat Reasonable
-  Marginally Reasonable
-  Not Reasonable

BMS Historical Performance

Last 5 Years

	2014	2015	2016	2017	2018
Wage to Revenue	15.53%	23.93% ↑	25.09% ↑	30.38% ↑	31.25% ↑
Operating Profit Margin	64.16%	57.45% ↓	56.93% ↓	51.40% ↓	49.41% ↓
Net Profit Margin	50.47%	36.71% ↓	35.15% ↓	26.02% ↓	26.38% ↑

- *30% wage to revenue appears reasonable compared to the industry average (24.8%). If this ratio continues to increase, it should be examined more critically.*
- *The Operating and Net Profit margins were exceptionally high in 2014 due to high amounts of waste from Rogers Place construction.*
- *Decreasing trend in Net Profit Margin is a concern whether or not BMS operates as a MCC or a Commission.*

Benchmarking Performance

2018 - Comparable Ratios (Solid Waste and Landfill Divisions ONLY)

	BMS	Aquatera	Waste Management	Chestermere Utilities Inc.	Prince Albert Utilities	Industry Average
Wage to Revenue	31.25%	21.62%	24.54%	16.45%	24.57%	24.80%
Operating Profit Margin	49.41%	32.95%	28.24%	13.15%	29.01%	17.88%
Net Profit Margin	26.38%	24.93%	12.89%	-5.12%	8.44%	4.92%

- *In most areas, BMS is leading its competitors*
- *The only area of concern is the comparably high Wage to Revenue ratio (which is not unreasonable compared to industry averages).*
- *BMS exhibits a healthy Net Profit ratio*

Benchmarking Executive Compensation

MNP: Executive compensation for Waste, Refuse and Recycling companies (\$20 Million Revenue Cap)

Position Information		Base Salary				Total Cash				Additional Survey Data
Planning Date of Data	Position Title from ERI	P40	P50	P60	Average	P40	P50	P60	Average	# of Incumbents (range)
08-19-19	CEO	\$ 211,521	\$ 235,345	\$ 266,368	\$ 238,038	\$ 230,484	\$ 256,462	\$ 290,285	\$ 259,368	35 - 59
08-19-19	CFO	\$ 147,925	\$ 163,236	\$ 183,475	\$ 165,196	\$ 167,518	\$ 185,176	\$ 208,243	\$ 187,358	20 - 34
08-19-19	COO	\$ 169,490	\$ 190,268	\$ 212,305	\$ 188,055	\$ 183,357	\$ 203,510	\$ 229,781	\$ 205,880	35 - 59

BMS: Executive compensation for Waste, Refuse and Recycling (Internal and Peers)

STRUCTURE PAY BANDS	PAY BAND POSITION CONSTITUTION	CURRENT BMS STRUCTURE (2019) -- TOTAL CASH COMP			PEER MARKET DATA (2019) -- TOTAL CASH (TCC / TDC)			TARGET TCC vs. MRKT VARIANCE (%)	MRKT VARIANCE (%) BY ORG LEVEL	ORG. LEVEL
		BASE SALARY MID-POINT	TCC TARGET	TCC MAX	P50 (MEDIAN)	P60	P75			
M4-13	General Manager	206,212	\$ 309,318	\$ 360,871	\$ 245,429	\$ 298,229	\$ 382,924	-19%	-20%	Exec
M3-12	VP Finance / CFO, VP Operations	171,843	\$ 214,804	\$ 236,285	\$ 209,421	\$ 226,053	\$ 267,357	-20%		
M3-11	Director, Finance	145,630	\$ 167,475	\$ 177,669	\$ 183,722	\$ 191,123	\$ 217,985	-23%		
M3-9	Controller, HR & Payroll Manager, Operations Manager, Business Development Manager	108,227	\$ 121,756	\$ 128,574	\$ 130,389	\$ 139,488	\$ 148,508	-18%		

- *As can be seen, the research into peers from both BMS and MNP match quite closely*
- *Both BMS and MNP Industry research show an average salary higher than what is currently being paid out at an executive level at BMS*
- *While the wage to revenue ratio is quite high, compensation is not the source of that issue, and could be raised to be more in line with Industry average*

Benchmarking Rates

Per tonne (unless stated)	BMS	Rosieridge	Medicine Hat	Aquatera	City of Calgary	City of Edmonton
Asbestos	\$120	n/a	\$160	\$235	\$170	Not accepted
Animal Carcass	\$60	\$10 each	Not posted	\$95	Not posted	Not accepted
Freon	\$25 each	\$20 each	\$20 each	\$20 each	\$17 each	\$16 each
Non-Local Waste (MSW)	\$60	\$110	Not Posted	Not posted	Not Posted	\$96
Normal Waste (MSW)	\$40	\$38.50	\$80	\$95	\$113	\$67
Construction Debris	\$25	\$19	\$25	\$95	\$113	\$90
Soil	\$8.50 (Up to \$18)	\$19-30	\$80	Not posted	Not posted	\$41

MNP Commentary on Rates: In most categories, BMS rates are in-line or far cheaper than others organizations, perhaps depending on location of landfill (i.e., rural or urban) and associated pricing strategy [see below]

- Rates are often established in consideration of volume targets and overall business strategy which can result in significant differences in rates between organizations and/or materials
- The rates showcased are publicly available, and are not internal rates, which may trend lower or higher depending on contract and/or price negotiations with certain customers



Pricing Analysis

Determine an accurate value of the Beaver Regional Landfill

Assumptions

Some of the changes and assumptions that were made to the original forecast include but are not limited to:

- Carbon Competitiveness Investment Regulation Payments (CCIR) have been included to reflect the potential amounts that will be paid out
- Capital Expenditures do not reflect another cycle of significant spending after the five-year cycle but assumes a consistent capex
- Working capital provided by management has been replaced to reflect industry standards working capital
- We understand the operation is tax exempt under section 149 of the income tax act. But a corporate tax impact would decrease the value by approximately \$19.4 million
- Terminal value assumes a stabilized level of operating cash flow
- We have applied the DCF methodology on an enterprise basis, based on management's projections

Forecast (2019-2023)

	Projected				
	2019	2020	2021	2022	2023
Revenues					
Disposal Contract 1	11,713,200	10,303,210	8,854,584	7,366,557	7,464,215
Disposal Contract 2	2,211,520	2,211,520	2,211,520	3,158,020	3,158,020
Disposal Revenue	1,585,000	1,500,000	2,000,000	2,000,000	2,000,000
Disposal Revenue 2	2,331,000	2,331,000	2,500,000	3,000,000	3,000,000
Disposal Revenue 3	1,253,232	3,892,918	3,928,000	4,215,622	4,518,050
Wastewater	-	-	-	-	-
Others	2,971,568	2,972,000	2,972,000	2,972,000	2,972,000
New	374,480	1,500,000	2,250,000	2,250,000	2,250,000
Total revenues	\$ 22,440,000	\$ 24,710,648	\$ 24,716,104	\$ 24,962,199	\$ 25,362,286
Operating expenses	(11,240,000)	(12,320,967)	(12,326,298)	(12,386,415)	(12,435,547)
<i>(operating expenses as a % of revenue)</i>	50%	50%	50%	50%	49%
Operating Income	11,200,000	12,389,681	12,389,806	12,575,784	12,926,738
<i>(operating income as a % of revenue)</i>	50%	50%	50%	50%	51%
Depreciation - sustaining projects	(2,090,271)	(2,343,608)	(2,405,833)	(2,109,468)	(2,362,791)
Amortization (airspace) & closure	(2,590,804)	(2,689,080)	(2,755,793)	(2,963,043)	(2,985,496)
Depreciation - business growth projects	(349,725)	(841,223)	(840,800)	(863,105)	(885,671)
Depreciation - Total	(5,030,800)	(5,873,911)	(6,002,426)	(5,935,616)	(6,233,958)
<i>(depreciation as a % of revenue)</i>	22%	24%	24%	24%	25%
Net Income	\$ 6,169,200	\$ 6,515,770	\$ 6,387,380	\$ 6,640,168	\$ 6,692,780
<i>(net income as a % of revenue)</i>	27%	26%	26%	27%	26%
Net Income	6,169,200	6,515,770	6,387,380	6,640,168	6,692,780
Adjustments					
Depreciation - Total	5,030,800	5,873,911	6,002,426	5,935,616	6,233,958
Adjusted EBITDA	\$ 11,200,000	\$ 12,389,681	\$ 12,389,806	\$ 12,575,784	\$ 12,926,738
<i>(EBITDA as a % of revenue)</i>	50%	50%	50%	50%	51%

- This slide reflects the items from projected revenue to Net income and is then adjusted to reflect the projected EBITDA
- This projected EBITDA later becomes the starting point of the DSC analysis on slide 42

Discounted Cash Flow Analysis

	Actual 2018	2019	2020	2021	2022	2023	Terminal Value
Revenues	\$ 20,121,821	\$ 22,440,000	\$ 24,710,648	\$ 24,716,104	\$ 24,962,199	\$ 25,362,286	\$ 25,900,000
Operating Expenses	(10,179,070)	(11,240,000)	(12,320,967)	(12,326,298)	(12,386,415)	(12,435,547)	(12,950,000)
Payments owed to Carbon Competitiveness Investment Regulation (CCIR)	-	(558,180)	(797,760)	(1,120,600)	(1,471,900)	(1,543,500)	(1,295,000)
EBITDA	9,942,751	10,641,820	11,591,921	11,269,206	11,103,884	11,383,238	11,655,000
<i>As a % of revenues</i>	<i>49.4%</i>	<i>47.4%</i>	<i>46.9%</i>	<i>45.6%</i>	<i>44.5%</i>	<i>44.9%</i>	<i>45.0%</i>
Less: Income Taxes	-	-	-	-	-	-	-
After-Tax Cash Flows Before Capex		10,641,820	11,591,921	11,269,206	11,103,884	11,383,238	11,655,000
Less: Capex, Net of Tax Shield, if any		(7,084,014)	(6,695,000)	(3,914,000)	(3,605,000)	(2,575,000)	(2,575,000)
Less: Investment in Landfill Cell		(4,600,000)	-	-	-	-	-
Less: Investment in admin building		(1,600,000)	-	-	-	-	-
Less: Post closure costs		(886,000)	(899,270)	(921,580)	(990,888)	(998,397)	(998,397)
Less: Working Capital Investments		(1,301,641)	(95,367)	(229)	(10,336)	(16,804)	(22,584)
Net Cash Flows to Invested Capital		(4,829,835)	3,902,284	6,433,397	6,497,660	7,793,038	8,059,019
Discount Period		0.50	1.50	2.50	3.50	4.50	4.50
Terminal Value Multiple							9.3 x
Terminal Value							74,967,623
Discount Rate (WACC)	12.8%	0.9418	0.8353	0.7408	0.6570	0.5827	0.5827
Discounted Cash Flows to Invested Capital		\$ (4,548,561)	\$ 3,259,448	\$ 4,765,944	\$ 4,269,225	\$ 4,541,322	\$ 43,686,702
Present Value of Discounted Cash Flows to Invested Capital		12,287,378					
Present Value of Terminal Value		43,686,702					
Present Value of Cash Flows to Invested Capital (rounded)		\$ 56,000,000					
	High	+ / 5%	\$ 58,800,000				
	Low	- / 5%	\$ 53,200,000				

- Slide 41 has EBITDA that reflects the amount before CCIR payments. After CCIR payments. The EBITDA for DCF purposes reflected above as CCIR payments are not part of the operating expenses projected by the management
- Tax is shown as a line item even though it's NIL (for visual purposes). Later we deduct Capex, one-time costs (e.g., landfill cell and admin building), post closure costs and working capital investments. This leads to net cash flows to invested capital
- We use the discount rate to present value those cash flows. Leading to an Enterprise Value (EV) of \$56m. We used +/-5% to show a range
- Further EV ranges are shown on the matrix tables in later slides

Return on Invested Capital (ROIC)

The following table shows the projected return on capital over the next 5 years under the following scenarios:

1. Cash Flow Before Member Distribution
2. Cash Flow After Member Distribution
3. Cash Flow After Member Distribution and Corporate Taxes

Return on Invested Capital (ROIC)	2019	2020	2021	2022	2023
After-tax Cash Flows	10,641,820	11,591,921	11,269,206	11,103,884	11,383,238
Book value of equity	44,131,839	48,005,750	51,008,176	53,443,792	56,177,750
Return on Invested Capital (ROIC) - Cash flow before member distribution	24.1%	24.1%	22.1%	20.8%	20.3%
Estimated Rate of Return	12.8%	12.8%	12.8%	12.8%	12.8%
After member distribution:	2,000,000	2,000,000	3,000,000	3,500,000	3,500,000
Return on Invested Capital (ROIC) - Cash flow after member distribution	19.6%	20.0%	16.2%	14.2%	14.0%
After member distribution and corporate taxes:	2,000,000	2,000,000	3,000,000	3,500,000	3,500,000
Corporate taxes	2,870,000	3,130,000	3,040,000	3,000,000	3,070,000
Return on Invested Capital (ROIC) - Cash flow after member distribution and corporate taxes	13.1%	13.5%	10.3%	8.6%	8.6%

- *Provided that there is no/before member distribution – ROIC will be the highest*
- *Provided that there is member distribution – ROIC will be in the middle*
- *Provided that there is member distribution and corporate taxes on the distribution – ROIC will be in the lowest*
- *Projected Book value of equity has been forecasted by the management*

Matrix Analysis

The following matrix table illustrates the impact on Enterprise Value, varying the discount rate and terminal EBITDA margin:

		Terminal EBITDA Margin				Enterprise Value (\$)
		30%	35.0%	40.0%	45.0%	
Discount Rate	10%	47,600,000	58,100,000	68,600,000	79,200,000	
	11%	42,100,000	51,100,000	60,100,000	69,100,000	
	12%	37,700,000	45,500,000	53,200,000	61,000,000	
	13%	34,100,000	40,900,000	47,700,000	54,400,000	
	14%	31,000,000	37,000,000	43,000,000	49,000,000	
	15%	28,500,000	33,800,000	39,100,000	44,400,000	

- Based on their current discount rate of 12.8%, BMS currently has a Present Value of Cash Flows to Invested Capital of \$56,000,000 (slide 42)
- The above table identifies where BMS's value is currently, based on the corresponding rates and margins