

February 6, 2020

Waste Services

Industrials

Market Rating

Market Weight

Investment Thesis

We recommend a MARKET WEIGHT position in the Waste Service industry as the industry is still under the impact of the Chinese National Sword, which took place in 2018. The industry is currently restructuring and recompiling, especially in the recycling sector. Meanwhile, we also expect steady market growth due to the increasing population and urbanization in the next five years.

Drivers of Thesis

- Growth in the population and urbanization drives the demand and the growth of the industry.
- Potential bills and acts may help the industry develop their infrastructures and help companies increase their profit margin.

Risks to Thesis

- The industry growth is steady but slow, less than 2% per year.
- The industry is still under the impact of the national sword and trying to restructure its recycling segments.
- Future environmental regulations may increase recycling costs for companies in the industry.
- Potential shortage of industry labor.

Key Industry Statistics

EBITDA Margin (TTM)

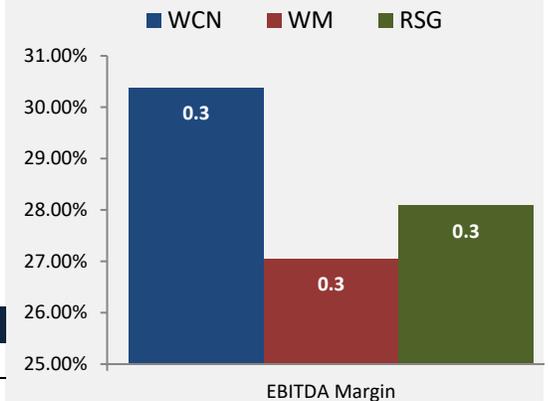
Waste Connections Inc (WCN)	30.38%
Republic Services Inc (RSG)	28.08%
Waste Management Inc (WM)	27.05%
Ad. Disp. Services (ADSW)	22.06%
US Ecology Inc (ECOL)	21.46%

Operating Revenue (3 Year Growth)

Waste Connections Inc (WCN)	32.48%
Waste Management Inc (WM)	4.79%
Republic Services Inc (RSG)	3.52%
Ad. Disp. Services (ADSW)	0.69%
US Ecology Inc (ECOL)	0.29%

PE Ratio

Ad. Disp. Services (ADSW)	299.45
Waste Connections Inc (WCN)	48.17
Republic Services Inc (RSG)	31.03
Waste Management Inc (WM)	28.02
US Ecology Inc (ECOL)	22.67



Industry revenue Estimates (In Billion U.S. Dollars)

Year	2017	2018	2019	2020E	2021E	2022E
Revenue	\$96.7	\$99.44	\$102.25	\$104.91	\$107.43	\$109.84
growth	4.68%	2.83%	2.83%	2.60%	2.40%	2.24%

12 Month Performance



Industry Description

The company in the Waste Service industry own and operate waste treatment or disposal facilities, including waste combustors (waste-to-energy plants), solid waste landfills, and compost dumps. Companies in this industry also provide waste collection and hauling services. The typical industrial service process includes the waste collection, transport, treatment, and disposal of waste, together with monitoring and regulation of the waste management process.

EXECUTIVE SUMMARY

We recommend a MARKET WEIGHT position for the Industrials – Waste Services industry. The Waste Service industry has grown 1% in 2019 and expected to grow 1.02% in 2020 [1]. Growth in the industry tied to the increase in the population, urbanization, consumer spending power, and the decrease in world crude oil prices. The unemployment rate also has a profound impact on the ability of companies to grow, as the general public would prefer an office working environment over the labor-intensive job, which causes the potential labor shortage in the industry.

The industry has high barriers to entry as the waste collection and disposal process is highly regulated by environmental law. Although the current sector is mature, companies in the industry still facing pressure from the recycling due to the immature recycling market in the U.S. Potential bills and acts are under the review by the federal and the local government, trying to stimulate the U.S. recycling market, hence, developing the industry.

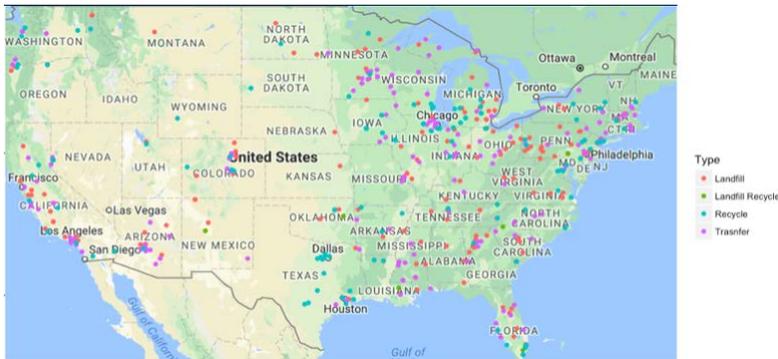
COMPANY DESCRIPTION

Waste Connections Inc (WCN) became a significant player in the industry in 2016. During 2016, WCN acquired Canada-based Progressive Waste Solutions (Progressive), moving the headquarters of the combined company to Ontario, Canada. In the U.S, the company operates waste collection and disposal services in addition to recycling operations through six regional operating segments:

The company offers collection services to residential, commercial, municipal, industrial, and Solid waste disposal and transfer (E&P) customers.

Meanwhile, landfill disposal and recycling services are offered to process various recyclable materials, including compost, cardboard, mixed paper, plastic containers, glass bottles, and ferrous and aluminum metals. The company owns and operates transfer stations that receive compact and load waste to be transported to landfills or treatment facilities through the truck, rail, or barge. The company also provides E&P waste treatment, recovery, and disposal services for waste resulting from oil and natural gas exploration and production activity, such as drilling fluids.

As of December 31, 2018, the company owns or operates a network of 279 solid waste collection operations; 113 transfer stations; 56 municipal solid waste (MSW) landfills; 11 E&P waste landfills; 14 non-MSW landfills; 64 recycling operations; 4 intermodal operations; 22 E&P liquid waste injection wells; 19 E&P waste treatment and oil recovery facilities in the North America [2].

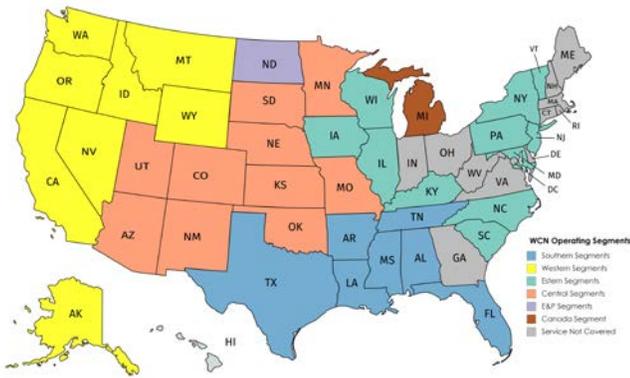


Source: Company Information

Collection Services

Waste Connections (WCN) provide the collection service to residential, commercial, municipal industry, and E&P customers. The collection service is provided under one of the following agreements: (1) official certificates; (2) exclusive franchise agreements; (3) municipal contracts; (4) residential subscriptions; (5) residential agreements; or (6) commercial, industrial and E&P service agreements.

The company has less bargain power under the official certificates, exclusive franchise agreements, and exclusive municipal contracts since most contacts are signed at established rates for providing the collection service at specific areas in the long-term.



Created with mapbox.com

In the market where exclusive contacts are not available, the company offers collection services for commercials and households with a subscription-based rate. The rate varies mainly from the states and the type of services provided. Waste Connections regional offices have the power to determine the subscription-based rates.

In specific E&P markets, the company offers containers and collection services to provide a closed-loop system for the collection of drilling wastes at customers' well sites and subsequent transportation of the trash to the company facilities for treatment and disposal. The E&P markets are highly regulated due to the environmental regulations and limit on-side storage/waste treatment polices.

According to the company 2018 10K, the revenue from the company's collection services weight 61% of the total revenue, which is the highest revenue-generating service.

For customers, the average rate of the weekly collection service could vary from \$10.00 - \$24.84 for 32-gallon residential garbage can based on the location. However, one of the trends across the nation is that WCN is trying to increase its collection service fees, largely due to the impact of Chinese National Sword. For instance, WCN's collection rate increase more than 3.24% in the city of Vancouver, WA from 2019 – 2020 [3]. We forecast the rate of WCN's collection service would continue to increase from 0.5% - 4% due to higher costs of waste processing.

its increasing costs from the investor and the general public to avoid potential down-grading comments.



Source: WCN 2019 10K

Landfill Disposal Services

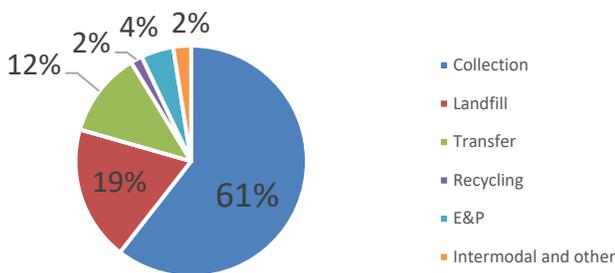
As of December 31, 2018, Waste Connection Inc. owned or operated 68 Municipal Solid Waste (MSW) landfills, 11 Exploration & Production (E&P-waste-only) landfills, 14 non-MSW landfills. During 2018, Nine of the MSW landfills also started to receive E&P waste [2].

The revenue at landfills is generated by charging tipping fees on a per ton or per yard basis to third parties based on the volume disposed of and the nature of the waste. Another way for landfills to generate revenue is to sell renewable energy – methane. In 2018, 52 of WCN landfills collect and sell methane.

According to the company 2019 10K, the average estimated lifespan for WCN's landfills (Leased + Owned) is in the range of 21 to 40 years.

Meanwhile, there are four landfill operating agreement going to expire range from 2022-2028. WCN is planning to renew four of the landfills. We anticipate WCN could

2018 Waste Connections Revenue Decomposition



Source: WCN 2019 10K

According to the company's 10K, WCN's solid waste collection revenue increased 7% from 2017 – 2018, we have also noticed WCN replaced individual *Intercompany Revenue* for each segment with the *Total Intercompany Revenue*, starting in 2018. We think WCN is trying to hide

successfully renew the operation contract before the expiry date. Even the company fails to renew the landfill agreement, according to the company strategy, WCN could also acquire other companies for landfills.

The landfill service contributes to the second largest revenue to the company, which weights 20% of the total revenue in 2018. Although the landfill tipping fee varies from the location to the location, we can still peak WCN's landfill margin from some of the sites.

Front Range Landfill, a wholly-owned subsidiary of Waste Connections, Inc located in Colorado, charges landfill disposal fees of \$69.00 per ton for *Household & Municipal Solid Waste Garbage* with the minute fee of \$138.00 [3]

According to Statista, the average cost of landfill municipal solid waste in the U.S. is around \$55.36 per ton, which means WCN could earn a 24% margin in Colorado's Front Range Landfill.

We anticipate WCN would earn the 20%-28% margin in other landfill locations in the U.S. We expect the margin of the landfill to decrease up to 5% in 2020 due to additional costs on processing surplus recyclings, along with the decreased compacity of existing landfills. A more detailed analysis of the company landfill can be found under the company analysis section.

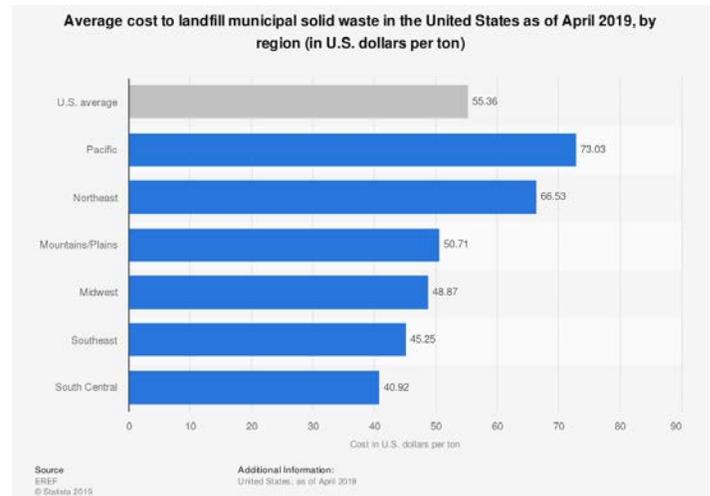
Transfer Station and Intermodal Services

Waste Connections owns or operates MSW transfer stations and E&P waste transfer stations to receive, compact, and load waste to be transported to landfills or other treatment facilities via truck, rail, or barge. Intermodal service also includes railing containerized international import and export goods through the Pacific Northwest. All though most of the transfer station are served as the company's network, WCN does provide the transfer and intermodal service to the third parties through long-term contacts.

As of December 31, 2018, Waste Connections owns and operates a total of 168 transfer and intermodal facilities, which includes 162 transfer stations and six intermodal facilities. In 2018, the revenue from the transfer service counts 12% [2] of the company's total revenue. The revenue at transfer stations is primarily generated by charging tipping or disposal fees on a per ton or per yard basis. The rates are based on the local market, type and

volume or weight of the waste, the distance to the disposal facility and the cost of disposal.

All through Waste Connections does not provide the rate and cost of transfer service directly. We can still perform



some estimates to calculate its margin. The following tables exhibit one of the WCN transfer station's disposal fees.

The rate WCN changes for Remodel/Demo Trash/Junk (excludes appliances, mattresses) is at \$28.50 [4] one cubic yard (CYD), with a minimal fee of \$57.00. According to the WCN, the average hourly wage for a garbage truck driver is around \$15/hour [2]. According to the AAA Colorado, the gas price on 2/5/2020 at Colorado Spring is around \$2.68/gallon [5]. Additionally, the distance from the transfer station to the Colorado Springs town center is approximately 7 miles, which requires 1.5-gallon gas for a garbage truck. Despite the depreciation and the regular maintenance cost of the truck, WCN earns \$8.14 CYD for Remodel/Demo Trash/Junk (excludes appliances, mattresses) transfer service, which is 40% gross margin.

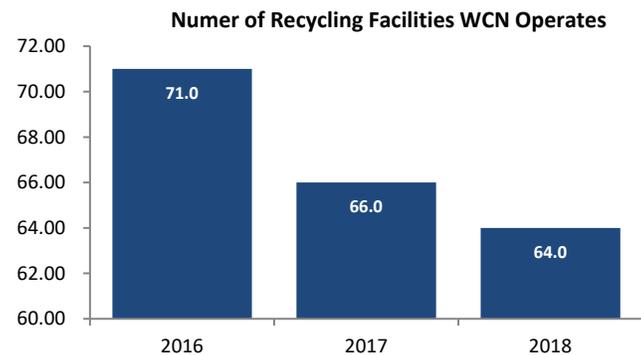
We anticipate WCN's other transfer stations would earn a 25% - 40% gross margin from the waste transfer service. We predict the transfer service fee would increase in the next 3-5 years due to the lower compacity on landfills.

Recycling Services

Waste Connections offer residential, commercial, industrial, and municipal recycling services for a variety of recyclable materials, including compost, cardboard, mixed paper, plastic containers, glass bottles, and ferrous and aluminum metals. WCN pre-processes and packs the

recyclables before selling it to customers in the United States and other markets, including Asia. The company’s recycling business encountered a big hit due to the Chinese National Sword, which took place in Jan 2018. Before the national sword, WCN could process the recycles at \$125-\$165 per ton and then sell the commodity to China at \$150 per ton, which reaches its break-even point on the recycling business. After the national sword, WCN could only sell the recyclables to U.S. customers at \$75 per ton or even lower, which causes WCN to lose 20%-40% margin on its recycling service.

Due to the decreased margin, WCN has been closing the recycling facilities in the U.S. starting in 2016. As of December 31, 2018, only 64 recycling facilities are remaining, compared to 71 in 2016. According to *the National Waste & Recycling Association Member Update – August 3, 2018* [6], WCN closed its recycling center in Washington County, NY, due to high operating costs. We anticipate WCN would close more recycling facilities in the future due to the low margin rate. The excess recycling commodities would either incinerated (burned) or buried at WCN’s landfill facilities.



Source: WCN 2019 SUSTAINABILITY REPORT

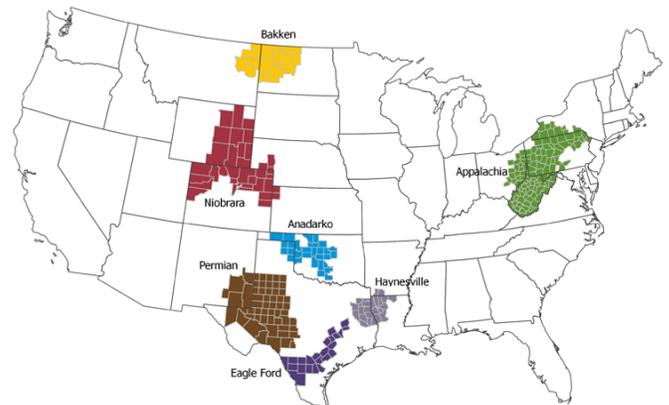
E&P Waste Treatment, Recovery and Disposal Services

E&P Waste is a broad term referring to the by-products resulting from oil and natural gas exploration and production activity, which includes drilling fluids, drill cuttings, completion fluids, and flowback-water. The primary customer of WCN’s E&P Waste Treatment, Recovery, and Disposal Services are customers in oil/natural gas production. Hence, WCN’s E&P revenue is highly tided to oil and natural gas exploration and production activities.

The E&P Waste Treatment, Recovery, and Disposal Services are regulated due to the environmental protection law. Under ecological protection law, various waste requires different disposal service. For instance, some trash can be disposed of at the regular E&P facility; some wastes cannot be destroyed and must be stored in the E&P liquid waste injection wells.

As of December 31, 2018, WCN owns or operates 22 E&P Liquid Waste Injection Wells and 19 E&P Waste Treatment and Oil Recovery Facilities. In 2018, WCN generated a total of \$256,262,000 from its E&P Services, which weights 4% of the total revenue.

The following graph shows the latest new-well / drilling locations in the U.S:



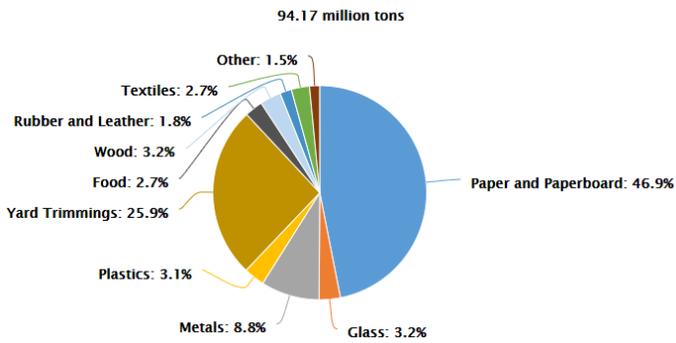
Source: U.S. Energy Information Administration

Since the majority of WCN’s E&P facilities are in Texas (few E&P sites are next to the new-well), We anticipate WCN’s E&P revenue would stay stable throughout 2020.

Company Analysis

One of the issues we think WCN currently facing is the decreased margin in recycling services and the compacity of its landfills. According to the United States Environmental Protection Agency (EPA [7]), 46.9% recyclables in the nation in 2017 is paper and paperboard.

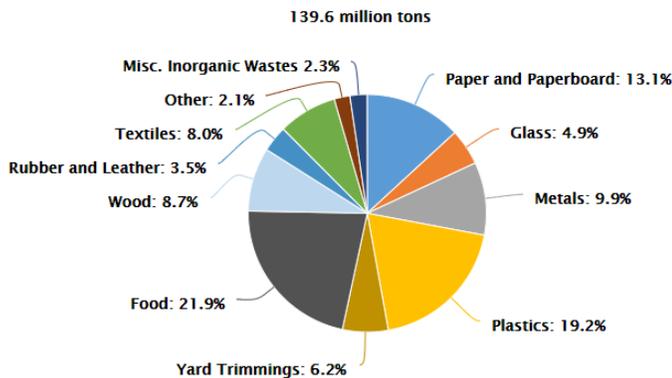
Total MSW Recycling and Composting by Material, 2017



Source: United States Environmental Protection Agency

As we mentioned before, before the national sword took place in 2018, WCN would pack the recyclables and sell to China as a commodity to reach its break-even point on recycling services. However, post the national sword, WCN is no longer profitable in its recycling business and has to find a way to deal with the recyclables. Luckily, most of the recyclables can be either incinerated (burned) to generated renewable energy or buried at the landfill facilities.

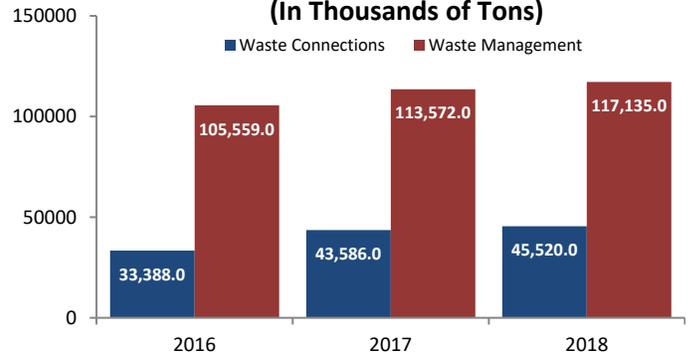
Total MSW Landfill by Material, 2017



Source: United States Environmental Protection Agency

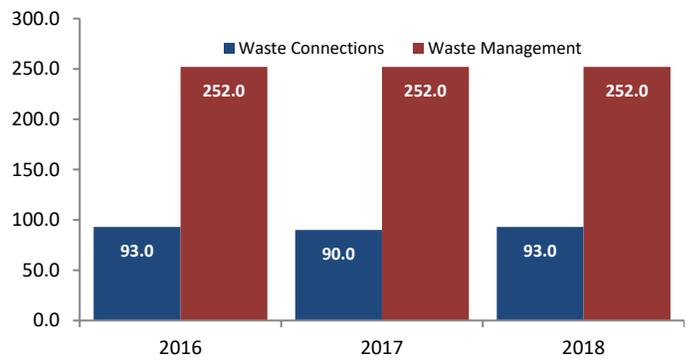
With the fact that WCN closed more than 7% recycling facilities, we anticipate WCN is currently disposing of recyclables in its landfill facilities. The following graph shows more information:

Total Waste Collected (In Thousands of Tons)



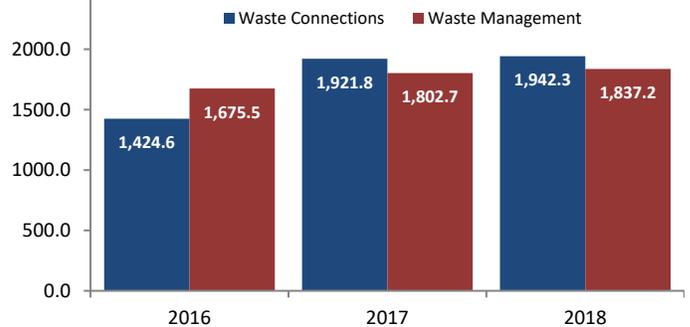
Source: WCN and WN 10K

Total Numer of Landfills Facilities



Source: WCN and WN 10K

Avg Waste Composed Per Landfill Daily (In Tons)



Source: WCN and WN 10K

The charts on the left side show, even though Waste Connections collects fewer wastes than Waste Management and operates fewer landfill facilities, WCN has much higher daily processing wastes in its landfills than its competitor, Waste Management.

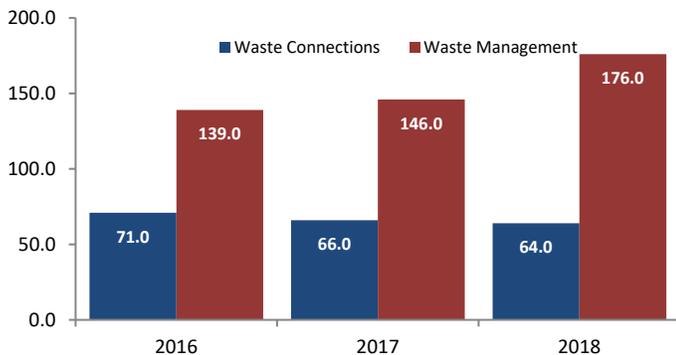
The ordinary day-to-day processing waste at each of the WCN's landfill suddenly increased by 35%^[2] from 2016 to 2017, while same the index for its competitor, Waste Management, only increased 7.5%^[8].

In other words, starting in 2017, under the impact of closing recycling facilities, Waste Connections' landfills need to deal with 35% more wastes than it used to be, while its competitor, Waste Management, only needs to deal with 7.5% more wastes.

We strongly believe the sudden increase in WCN's landfill wastes is related to the shutdown of its recycling facilities. As 7% of recycling facilities were closed in 2016, the recyclables had to be transferred and dealt with, either incinerated (burned) or buried at the landfill facilities.

While WCN was busy at closing recycling facilities, Waste Management increased its recycling facilities from 139 in 2016 to 176 recycling facilities in 2018. We anticipated WCN would continue to close its recycling facilities in 2020 and to acquire more landfills through the merger and acquisition, to process its recyclables.

Total Number of Recycling Facilities



Source: WCN and WN 10K

RECENT DEVELOPMENTS

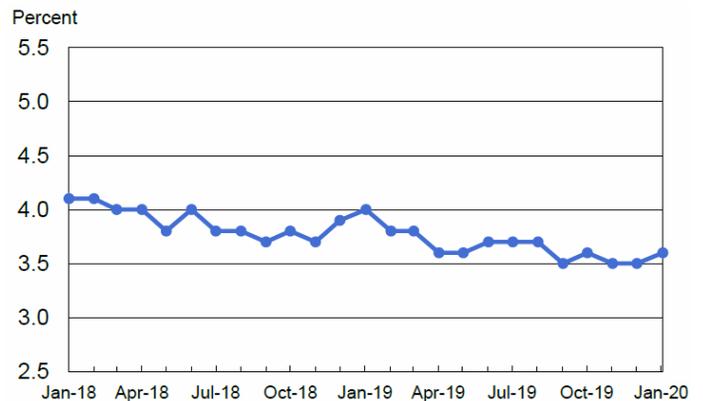
The industry is recently shaken itself from the impact of the Chinese National Sword. While the Feral and local governments are trying to help the sector re-shaken, there're potentially currents going on in the industry, which would significantly impact the industry's future.

Shortage on Labors

According to the report titled "Recruiting Personnel for Solid Waste Collection Services" published by Solid Waste Association of North America's (SWANA) Applied Research Foundation (ARF), there will be a driver shortage in next 2 – 3^[9] years due to the aging workforce, occupational danger, and increased demand for trucking services because of the industry growth, and low participation of women in the industry.

We anticipate the industry would have more labor shortages in the future, not only due to the industry growth but also under the impact of current economic conditions and immigration laws.

**Unemployment Rate, Seasonally Adjusted,
January 2018 – January 2020**



Source: US Department of Labor Statistics

The recent unemployment rate reaches to 3.6%^[10] in January 2020, which is the lowest rate in two years. The low unemployment rate indicates the public has various job options to choose from. Instead of applying a labor-intensive job, such as a garbage truck driver, one is more willing to seek a role in the office environment. The current low unemployment rate discourages people from entering the Waste Service industry.

Furthermore, trump's strict policies towards immigration result in the sector losing more potential labor force from other countries. We project the company in the sector would increase hourly salaries to track more laborers.

Bills to Help the Industry.

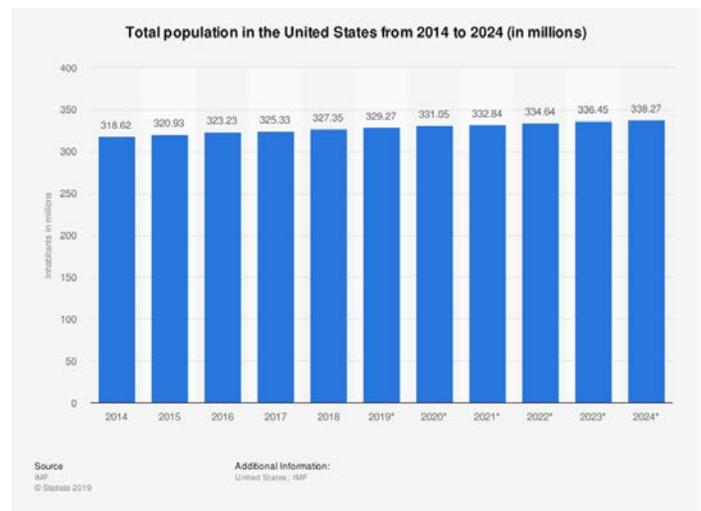
Under the impact of the national sword, many companies in the industry had a hard time and started calling assistance from the government. In 2020, companies may get their wishes came true. Currently, there is a total of four bills under review by Congress, which may help the industry in the future, especially in the recycling sector. The bills/acts are summarized below:

- **Recycle Act:** Recycle Act was introduced in November 2019, the legislation would, over the next five years, authorize up to \$15 million per year in grants to states, tribes, nonprofits and other entities seeking to ramp up recycling activity and education. Additionally, the bill would also task the U.S. EPA with developing a toolkit to boost recycling participation and reduce contamination, updating guidelines for products made with recycled material and encouraging more federal procurement of such products.
- **Recover Act:** Largely prompted by the industry groups, the act would funnel \$500 million from the federal government to states to help build recycling infrastructures, improve recycling collection and processing, and the development of curbside equipment, drop-off sites, and MRFs.
- **Save Our Seas 2.0:** The act seeks to tackle the issue of marine debris and plastics pollution, which has brought the plastics industry under scrutiny by environmental groups and the public. We anticipated the bill would bring more regulations on processing plastic recyclables, which would increase companies' costs on processing recyclables.
- **Break Free from Plastic Pollution Act:** The industry has shown the least enthusiasm for the bill, as the enshrine extended producer responsibility for the packaging and target expanded polystyrene food ware, along with single-use plastic bags, plastic straws and other related items. If the act was passed, we anticipate the bill would decrease the current recycling pressure in the industry in the short term, but the act will hammer companies' revenue on the recycling service in the long run as plastic makers would try to produce less plastic packages and hold extra caution when creating the plastic containers.

As the industry begins to focus more on the recycling process, we anticipate companies would take more actions on recycling services, including charging a higher price to the consumers. Mergers and acquisitions may become more prevalent in 2020 as companies in the industry start to adjust their business model and strategies. Meanwhile, we project that there will be some bills passed by the federal and local governments either help the industry or tighten the regulations on recycling sectors. Overall, based on the current economic environment, we estimate slow growth for the industry in 2020.

The sector is Still Growing with Low Speed

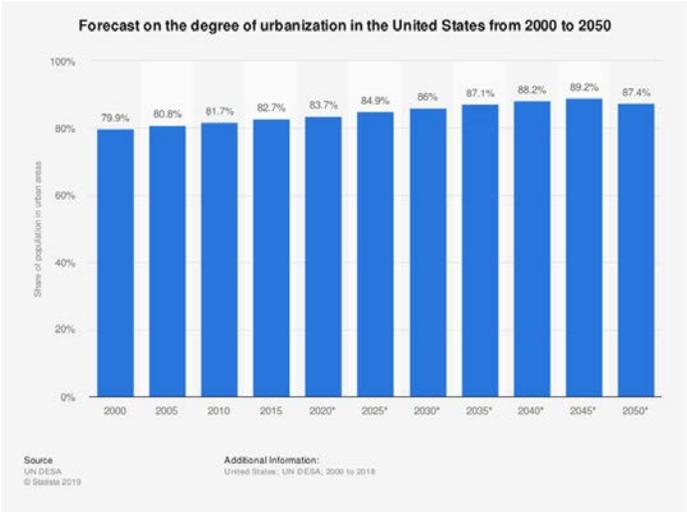
The average American produces 4.4 pounds of trash every day. With 323.7 million people living in the U.S, there are approximately 728,000^[11] tons of garbage per day, which is enough full fill 63,000 garbage trucks. With the continuing increase of U.S. pollution, the waste service industry has a steady demand in the future.



Not only the growing population would trigger the industry demand, but also the degree of urbanization would perform the same trick. According to Statista, the degree of urbanization in the U.S would reach 89.2% by 2045, which would trigger an even higher demand for waste collection and disposal services. Hence, we project the industry would continue to grow at least 1% in the year 2020.

INDUSTRY TRENDS

MARKETS AND COMPETITION

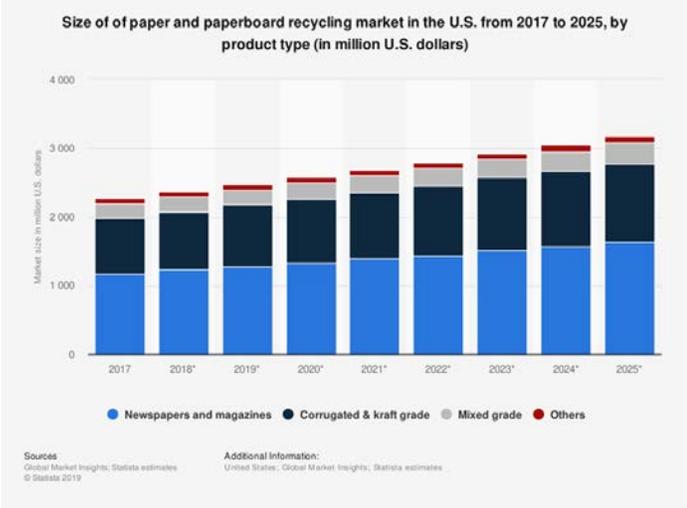


The demand for the Waste Services are highly related to the consumer spending power, population growth, percentage of urbanization, and consumer living style since most waste are generated from consumer products and packaging. Over the past five years, the unemployment rate has declined, and income has been improved. According to IBISWorld, the annual growth for the Waste Service industry is around 1.0% from 2014-2019 and will increase and up to 1.2% from 2019-2024.

Revolution starts with Recycling

Due to the national sword, companies in the industry are seeking a new way to perform the recycling business. Some companies began to invest in the recycling segment, others (like WCN) decided to deal with the short-term issue (eliminating the low margin business) first. Meanwhile, as we mentioned above, the general trend for the federal government and local states is to help and develop the recycling industry.

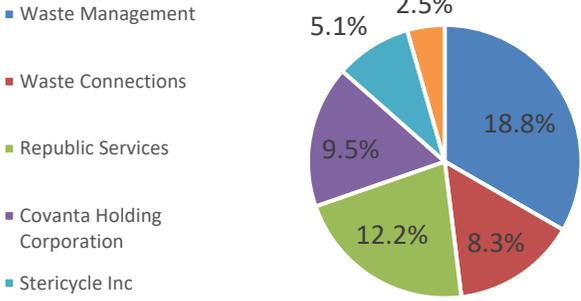
With the strong economy in recent years, the sector is growing slowly with the overall economy. Meanwhile, the industry is also heavily regulated by the local and federal government, especially for the Landfill services, which creates a high barrier for others to enter. On the other hand, companies in the industry can also benefit from other regulations that provide incentives for recycling or producing energy from waste. In general, the industry is at its mature state and grow slowly.



Some of the dominant players in the industry are Waste Management Inc (Ticker: WM), Waste Connections Inc. (Ticker: WCN), Republic Services Inc. (Ticker: RSG), Covanta Holding Corporation (Ticker: CVA), Stericycle Inc. (Ticker: SRCL). The most significant player in the industry is Waste Management, which holds 18.8% of the total market share, followed by the Republic Service (12.2% of the market share).

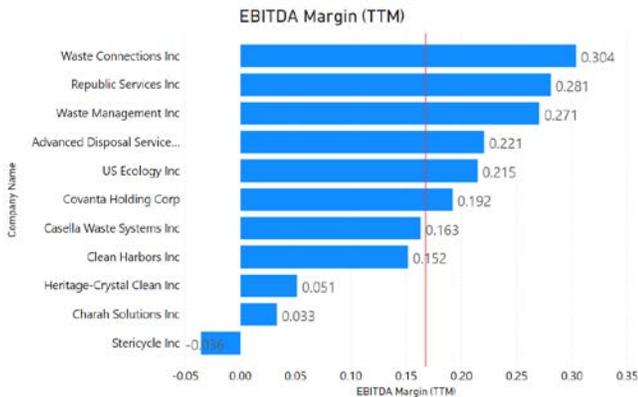
The diagram from Statista proofs the potential growth inside the recycling market. By 2025, the size of the recycling market in the U.S. will exceed more than \$3,000 million. We suggest companies in the Waste Service industry invest capital in the recycling market, to gain market shares in advance.

Market Share for Players in The Industry



Source: IBIS World

Peer Comparisons



Source: Companies 10K

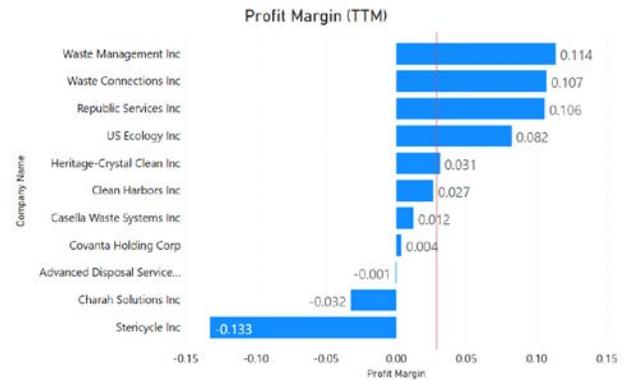
The EBITDA margin is calculated from a company's operating profit as a percentage of its revenue. EBITDA margin measures how much cash profit a company made in a particular year. The EBITDA margin is an essential indicator in the Waste Service industry as companies in the sector highly rely on its labor-intensive operations to generate revenues from their customers.

The average industry EBITDA margin is at 17%, which means, on average, companies in the industry use 83% of sales revenue for sales expenses (excluding depreciation and amortization). Overall, 54% of companies in the sector exceed the industry standard; 46% of companies do not.

For companies above the industry EBITDA margin, Waste Connections has the highest EBITDA margin than others, which indicates Waste Connections operates most efficiently in the industry, according to the EBITDA margin.

However, the EBITDA margin is an ineffective indicator of financial performance for companies with high levels of debt or for companies that consistently purchase expensive equipment for their operations. If a company has a low net income, it can also use the EBITDA margin to inflate its financial performance. So, we need to inspect other ratios of companies in the industry, for instance, the profit margin.

The following graph shows the profit margin for companies in the industry. The average profit margin is at 3%, which means companies in the sector receive \$0.03 for each dollar of sales generated.



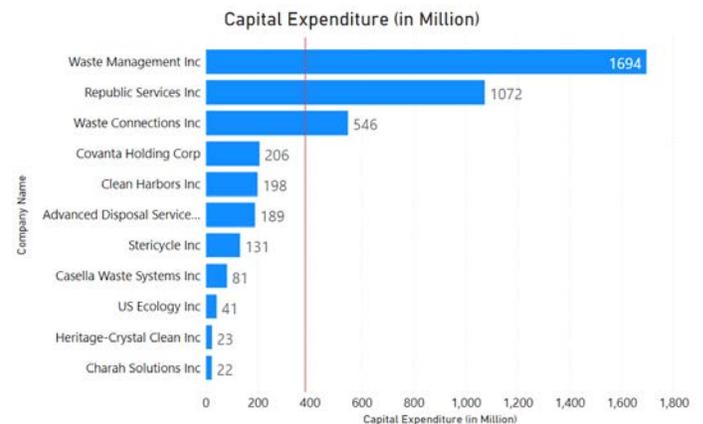
Source: Companies 10K

As the graph above shows, Waste Management Inc generates most (\$0.114) income for each dollar of sales made. At the same time, Covanta Holding Corp and Advanced Disposal Service are way below the average industry profit margin. Specifically, those two companies are struggling to stay profitable.

It looks like Waste Management has not only a high EBITDA margin but also a high-Profit Margin in the industry. We anticipate that it might be the case Waste Management had a considerable capital expenditure in the past few years, and now the expenses are paying the return.

Capital expenditure is essential for companies in the industry, as the quality of Landfills, the condition of garbage trucks, and the functional equipment at transfer stations are vital for the company's day to day operations.

Next, we will examine the capital expenditure in the industry to verify our thoughts.



Source: Companies 10K

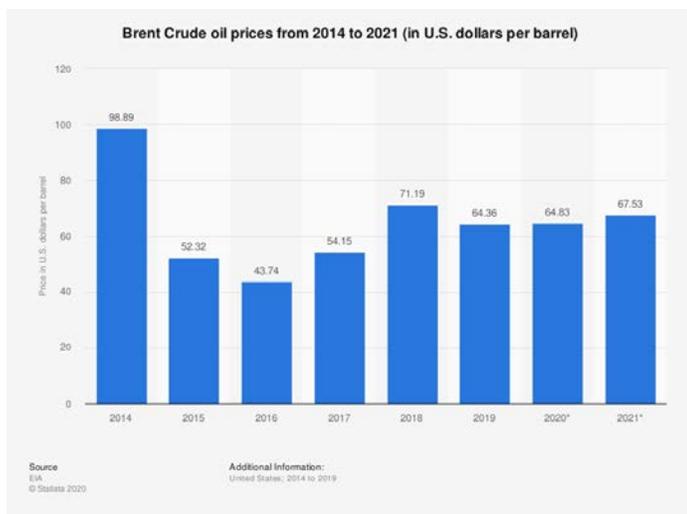
The industry standard capital expenditure is around \$382 million per year. Waste Management Inc has the highest

average capital expenditure of \$1694 million per year, which is 343% more than the industry standard. In general, Waste Manage Inc is the leader in the industry who does not only outperform its competitors but leading the industry standard right now.

ECONOMIC OUTLOOK

As the industry is highly correlated with economic activity, some of the drivers that affect the Waste Service industries in the U.S include the world price of crude oil and Disposable Personal Income. Growth in the sector is expected to be fueled by rising consumption levels and increased regulations.

World Price of Crude Oil



The price of crude oil directly impacts waste collection services in the industry. A higher price on the crude oil price would increase the company’s day-to-day operating expense on the gases required by the garbage truck. Luckily, according to Statista, the crude price is going to decrease and become stable at \$67.53 per barrel in 2021, which means companies in the sector do need to worry too much about the sudden revenue decrease due to the hike of the gas price.

Disposable Personal Income

Disposable income, also known as disposable personal income (DPI), is the amount of money that households have available for spending and saving after income taxes have been accounted for. The amount of money that families have immediately determines whether they

would purchase the waste service from the company or not.

According to the Feral bank of St. Louis, the DPI has been keeping increasing over the last five years, which means households have more and more purchasing power over the previous five years. On the other hand, households would be most likely to purchase the waste collection services offered by companies in the industry, instead of disposing the trash by himself/herself.

Disposable Person Income in the U.S.



Source: Federal Reserve Bank of St. Louis

INDUSTRY POSITIVES

- Growth in the population and urbanization drives the demand and the growth of the industry.
- Potential bills and acts may help the industry develop their infrastructures and help companies increase their profit margin.

INDUSTRY NEGATIVES

- The industry growth is steady but slow, less than 2% per year.
- The industry is still under the impact of the national sword and trying to restructure, especially on recycling segments.
- Future environmental regulations may increase recycling costs for companies in the industry.
- Potential shortage of industry labor.

KEYS TO MONITOR

Regulation bills and infrastructure-building acts are the key factors to monitor. In the future, we project the recycling market in the U.S will start to grow and expand, which brings more profits to companies in the industry.

However, if the industry found a way to outsource its recyclables, for instance, China suddenly lifted the national sword, then the recycling market in the U.S won't grow as strong as we expected. At the same time, companies in the Waste Service industry could continue to profit through outsourcing the recyclables.

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