

**2019**  
**SUSTAINABILITY**  
**PROGRESS REPORT**



# 2019 UPDATE

In 2018 we issued a comprehensive sustainability report detailing the progress we are making toward our sustainability goals and vision. In that report, we discuss:

- **Our mission** to protect the environment and strengthen our local communities, as we grow our business by creating value from society's waste streams;
- **Our resource renewal vision** of a future in which nothing would be wasted, resource extraction would be all but eliminated, and human society could come into alignment with natural systems; and
- **Our Resource Solutions**, or the integrated services we provide to help our customers achieve their waste- and recycling-related sustainability goals.

The full report is available at [casella.com/sustainability](https://casella.com/sustainability).

With this 2019 progress update, we will briefly provide some highlights and accomplishments that we are excited about, along with an updated quantitative sustainability scorecard. Another full report will be released in 2020.

## Sustainable Recycling Solutions

A recurring theme of our 2018 report is our commitment to creating truly sustainable recycling solutions, built on a sound foundation of environmental stewardship, economic viability, and social benefit.





## RECYCLING

Led by our Zero-Sort® recycling facilities, this year we recovered over **650,000** tons of materials such as cardboard, paper, plastic, glass and metal.

Recycling commodity markets continue to struggle, but we are encouraged by the many customers who are stepping up to our Recycle Better challenge. In light of concerns that plastics processed overseas may be contributing to the marine debris, we are proud to assure our customers that 100% of our residential plastics recycling volume is processed and sold in the U.S.



## COLLECTION

We provide safe, reliable, and environmentally-sound waste and recycling collection services to over **150,000** businesses, institutions, and municipalities throughout the Northeast.

We are continuing to modernize our fleet with newer trucks that are cleaner and more fuel efficient than their predecessors.



## ORGANICS

We transform organic waste streams into nutrient rich **earthlife®** soil products, animal feed, and renewable energy. Annually, we recycle over **400,000** tons of organic materials.

In 2018, we recovered over 100,000 tons of food waste, including liquid food residuals, commercial and residential food scraps, and packaged food and beverage products.



## ENERGY

We produce 5x more energy than we consume. Along with our partners we generate over **200,000** Megawatt-hours of renewable energy each year.

We continue to produce 3.5 times as much electricity as we consume. We do this through a combination of renewable energy investments and energy efficiency practices.



## LANDFILLS

Every minute, our safe, secure, and low emission landfills can capture over **8,000,000** BTUs of gas for conversion into renewable energy.

In 2019, our landfill open houses enjoyed record attendance as thousands of people turned out to meet with us and learn about our operations.



## SOLUTIONS

We help our customers meet their **resource management goals** by providing consulting, sourcing, customer care, reporting, and other customized services.

Recycling remains strong with our industrial customer base. With hundreds of vendor partners, we have built relationships to continue finding sustainable solutions for high value plastics.

# SCORECARD

## RESOURCE RENEWAL

### Tons Recycled and Disposed

### Detailed Description

Material Recycled	Recycling tons received, processed, and brokered; consisting of ONP, OCC, ferrous & non-ferrous metals, PET, HDPE, LDPE
Organic Material Recycled	Organic recycling tons processed or directly land applied for beneficial use of nutrient and carbon value

### TOTAL TONS RECYCLED

Municipal Solid Waste Disposal	Includes waste from residential, commercial, or institutional generators. Institutions include schools and hospitals
Industrial & Construction Waste Disposal	Includes materials such as ash, sludge, construction & demolition debris, contaminated soils, and industrial wastes
Material Disposed in Landfill with LFGTE	Solid waste tons disposed of in Casella landfills with energy recovery (Landfill Gas to Energy)
Material Disposed in Landfill without LFGTE	Solid waste tons disposed of in Casella landfills without energy recovery
Material Combusted in Waste to Energy	Solid waste tons disposed of in the Casella WTE facility, after processing

### TOTAL TONS DISPOSED

Disposal in Facilities with Energy Recovery	Tons disposed of in landfills with energy recovery, as a % of all tons disposed
MSW Recycling/Diversion Rate	Material recycled, divided by the sum of material recycled and MSW disposed

### OVERALL RECYCLING/DIVERSION RATE

Total tons recycled (material recycled plus organic material recycled), divided by the sum of all tons recycled and disposed

### Energy Produced and Sold

### Detailed Description

Energy Produced from Waste Combustion	Megawatt hours produced and sold at Maine Energy
Energy Produced from Landfill Gas and Biogas	Megawatt hours produced and sold at Casella owned/operated LFGTE and AD facilities

### TOTAL ENERGY PRODUCED BY CASELLA (MWH)

Total Energy Produced by Casella + Partners (MWH)	Megawatt hours produced and sold at Casella owned/operated facilities and partner LFGTE plants (Ontario & Coventry)
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2005 Baseline	2010	2015	2017	2018	TARGET
468,423	580,655	739,081	776,972	651,480	
215,679	310,934	477,611	430,186	423,875	
684,102	891,589	1,216,692	1,207,158	1,075,355	1 Million tons/year recycled
1,633,161	1,776,096	2,113,825	2,061,069	2,067,420	
1,271,429	1,464,007	1,683,894	1,898,471	2,092,185	
930,516	1,701,517	2,197,825	2,256,208	2,359,379	
1,750,237	1,546,222	1,599,894	1,703,332	1,800,226	
209,156	200,778	-	-	-	
2,889,909	3,448,517	3,797,719	3,959,540	4,159,605	
39%	60%	58%	57%	57%	100% to LFGTE Landfills
22%	25%	26%	27%	24%	
19%	21%	24%	23%	21%	
159,913	121,591	-	-	-	
-	98,651	85,512	83,346	79,367	
159,913	220,242	85,512	83,346	79,367	
		202,555	203,847	203,626	

## ENERGY & ENVIRONMENT

### Greenhouse Gas Emissions

### Detailed Description

Landfill GHG Emissions (metric tons CO2e)

Total landfill GHG emissions calculated using EPA Part 98 methods (note: prior reports used EPA Climate Leaders Protocol)

Facility and Fleet GHG Emissions (mtCO2e)

Total GHG emissions calculated using EPA Climate Leaders Protocol; includes direct emissions from on-site and fleet fuel combustion and indirect emissions from electricity purchases

### TOTAL SCOPE 1 & 2 GHG EMISSIONS

### TOTAL SCOPE 1 & 2 GHG EMISSIONS PER TON (KG/T)

Total GHG emissions divided by total tons recycled & disposed

### Greenhouse Gas Benefits

### Detailed Description

Estimated GHG Benefit of recycling (metric tons CO2e)

Together with our customers, we recycle hundreds of thousands of tons per year. This recycling has a GHG benefit, which we've estimated here using the EPA WARM model. We do not take credit for these benefits in our own corporate carbon footprint.

Estimated GHG Benefit of electricity production (metric tons CO2e)

The electricity produced in our power plants creates a GHG benefit, which we've estimated here using the New England eGRID 2010 emission factors. We do not take credit for these benefits in our own corporate carbon footprint.

### Energy Consumption

### Detailed Description

Electrical Energy Consumption (MWh)

Megawatt hours consumed in buildings and facilities

Natural Gas Consumption (stationary, therms)

Therms of natural gas consumed in buildings and facilities

Fleet Diesel Consumption (gallons)

Gallons of diesel consumed by vehicle fleet

### Other Environmental Indicators

### Detailed Description

Environmental Compliance Enforcement Actions

Number of environmental compliance enforcement actions

Environmental Compliance Enforcement Actions Rate

Number of environmental compliance enforcement actions per facility (e.g., 5 enforcement actions div by 100 facilities = 0.05)

Petroleum Releases

Petroleum spills that meet the criteria of being state or federal reportable

## OUR PEOPLE

### Employee Engagement

### Detailed Description

Employee Retention Rate

Percent of all full-time employees who remain with our company annually

401(k) Participation Rate

Percent of all eligible employees participating in the company's 401(k) plan

Stock Purchase Plan Participation

Percent of all eligible employees participating in the company's stock purchase plan

### Health & Safety

### Detailed Description

Total Automotive Accidents

Total number of fleet claims determined to be preventable

Total Employee Injuries

Total number of workers compensation claims determined to be preventable

DART Rate

Days away from work, restricted activity, or transferred to another job due to an on-the-job injury; this number represents the # of occurrences per 200,000 hours worked

Worker's Compensation MOD Rate

Our Workers Compensation MOD Rate adjusts the cost of our insurance based on our number of OSHA recordable events relative to others in our industry. At a MOD rate of 1.0, a company pays industry average insurance costs because they perform at industry average, as set by the National Council on Compensation Insurance (NCCI). Rates below 1.0 indicate that the company's performance is better than average, justifying lower than average insurance costs.

## OUR CUSTOMERS & COMMUNITIES

### Community Engagements

### Detailed Description

Charitable Contributions

Charitable cash donations (this figure does not include in-kind services)

Note that historical GHG emissions are recalculated and restated as needed to reflect updated Global Warming Potential guidance from EPA and, most recently, the IPCC 5th Assessment Report.

Select historical greenhouse gas, energy consumption, and charitable giving figures have been corrected to reflect data corrections

2005 Baseline	2010	2015	2017	2018	TARGET
	743,676	567,669	519,807	547,974	
	198,705	78,309	78,780	74,641	
	942,380	645,978	598,587	622,615	
	217	129	116	119	Continuous improvement
	1,640,000	2,090,000	2,200,000	1,840,000	
	73,000	28,000	28,000	26,000	
42,955	17,842	21,651	26,778	22,655	Reduce energy intensity
141,305	580,072	104,689	86,757	119,041	
5,760,043	5,701,828	6,201,912	6,159,833	5,958,848	Reduce fuel intensity
7	12	31	4	19	Continuous improvement
0.05	0.09	0.24	0.03	0.11	Continuous improvement
n/a	81	108	70	78	

2005 Baseline	2010	2015	2017	2018	TARGET
70%	85%	72%	73%	71%	Continuous improvement
n/a	43%	69%	71%	80%	Continuous improvement
n/a	5%	6%	8%	7%	Continuous improvement
258	266	396	357	569	Continuous improvement
321	173	189	206	253	Continuous improvement
1.67	1.76	1.46	4.8	6.09	Continuous improvement
	0.97	0.74	0.73	0.83	Continuous improvement

2005 Baseline	2010	2015	2017	2018	TARGET
\$450,924	\$303,267	\$170,600	\$359,416	\$297,498	



RECYCLING • SOLUTIONS • ORGANICS • COLLECTION • ENERGY • LANDFILLS

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