

# 2014 **SUSTAINABILITY REPORT**

Capturing Value from Waste through  
Innovative Resource Solutions



## INTRODUCTION

# SOLUTIONS WANTED

## HOW CAN WE ALL RECYCLE MORE AND WASTE LESS?

**A**cross the country, thousands of municipalities, businesses, institutions, and households are working to increase their recycling and reduce their waste. They understand how wasting less and recycling more can help conserve resources, protect the climate, support jobs, and create value. Some have already made great progress, and others are just getting started, but nearly everyone wants to be doing more.

As a resource management company, we view our customers as partners, each with their own values, expertise, and a unique set of waste streams waiting to be renewed.

To each customer partnership, we bring decades of practical experience, insights from multiple industries, a willingness to listen and innovate, and a passion for providing resource solutions.


Resource Solutions are the comprehensive services we provide to help our customers achieve their resource management goals, from today's pressing needs to tomorrow's visionary aspirations. The solutions we provide include: Recycling, Collection, Organics, Energy, and Landfills.

For complex industrial, institutional, or multi-location customers, we bring all of these services together with our professional expertise to deliver a holistic, custom-tailored Resource Solutions approach.

### Recycling and value creation

Throughout this report, we often refer to "value creation." With this we are referring to the proven idea that holistic resource management can create real value for businesses, for example by uncovering operational inefficiencies, reducing unnecessary purchasing, minimizing waste disposal, and engaging employees and customers around positive environmental performance. ♦





We know that there is no one-size-fits-all solution for our industrial, institutional, municipal, and commercial customers. We leverage our expertise and our partnerships to create holistic strategies that bring together all of our solutions and are customized to each customer's needs.

Our comprehensive Resource Solutions enable us to apply our knowledge and experience in recycling, collection, organics, energy and landfills to create economic and environmental value for our customers and our communities.



# LETTER FROM THE CEO

Nearly four decades ago my brother Doug and I built Vermont's first recycling facility in our hometown of Rutland. It was a simple plant for baling cardboard, and other material and we had simple motives: 1) to serve and create value for our customers; 2) to grow and diversify our business; and 3) to play a part in protecting the natural heritage and landscape of Vermont.

It was not a term anyone used widely back then, but our small recycling plant was built upon the foundation of sustainability — both environmental and economic. This is the only true sustainability; one does not exist without the other.

From that first facility — and on that foundation — we have built a company with a vision of solid waste management powered by a broad and enduring commitment to providing recycling, collection, organics, energy, and landfill services, and other resource solutions.

Now, forty years later, you are viewing our company's third sustainability report. We've shared it with you at a time in history when sustainability is no longer simply an experiment, but an imperative. It is no longer a buzzword, but a powerful framework for addressing the challenge of our planet's limited resources while driving economic opportunity and strength, innovation, creativity and quality of life.

## We have three goals for this report.

**First.** Celebrate the progress our company has made in contributing to the sustainability of our planet, our communities and our customers' lives and businesses. Also, we rely on this report, and the public life it lives, to hold us accountable to our beliefs and our behaviors.

**Second.** Share with you our local, homegrown perspective on sustainability from our unique perch here in the northeastern United States. We are a local company, blessed to live and work alongside our customer and communities. We see — and share — their challenges, their needs, their goals, and their vision for their own lives and livelihoods everyday in a way only a New England company with Vermont roots can.

**Third.** Begin a vital conversation about how we all view the social, economic, and environmental value resource renewal and resource solutions create across our marketplace, our nation, and our planet. We are at an important moment in history, a turning point that has given us an opportunity to shift the way we look at our resources and the investments we may be required to make to sustain a high quality of life. Many of our paradigms and approaches are antiquated, and will not serve us well in the future. What has worked for the previous four decades, we believe, won't work for the challenges of the next ten, twenty, or forty years. We don't necessarily have the answers, but everyone needs to be a part of the conversation — a conversation we'd like to lead.

While we talk a lot in this report about our facilities, hard assets and investments, and our services, I firmly believe that the coming years will reveal our people and our partnerships to be our most compelling assets. Faced with the tremendous task of developing a whole new infrastructure for resource sustainability and inspiring deep shifts in public thinking and behavior, we must not underestimate the power of our talented, passionate people working in partnership with motivated customers, engaged communities, and visionary organizations.

So, it is our people who make this report more than a document, who live our beliefs everyday, and to whom we owe our thanks.



Regards,

A handwritten signature in black ink that reads "John W. Casella". The signature is fluid and cursive, with a large loop at the end.

John W. Casella  
Chairman & CEO  
Casella Waste Systems, Inc.

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## About This Report

Every other year, we report on the progress we are making toward our resource renewal vision. This year’s report is divided into three sections. **Section 1** focuses on the services we provide and the ways we partner with our customers to help them achieve their waste reduction goals. **Section 2** focuses on our own operations and the ways we are “walking the walk” by recovering resources and being more efficient with our own fleets and facilities. **Section 3** focuses on the people side of sustainability: the ways we are educating our employees and engaging our communities to achieve our mission.

### Casella Waste Systems, Inc.

**Headquarters:** Rutland, VT, USA

**Operating Footprint:** VT, NH, ME, MA, NY, PA

**Business Units:** Eastern, Western, Recycling, Other

**Number of Employees:** Approximately 1,800

**Revenue:** \$497.6 million for FY 2014 (ending April 30, 2014)

**NASDAQ:** CWST

### We invite our readers to send comments or questions regarding this report to:

Casella Waste Systems, Inc.

Attention: Abbie Webb

25 Green Hills Lane

Rutland, VT 05701

abbie.webb@casella.com

This report is prepared partially in accordance with the GRI G4 ‘Core’ guidelines. We are phasing in the implementation of GRI G4. Further implementation of the G4 guidelines, including a full stakeholder engagement program, materiality assessment and value chain discussion will be included in future reports.

# OUR RESOURCE RENEWAL VISION

WE HAVE BELIEVED IN A VISION FOR RESOURCE RENEWAL LONG BEFORE IT WAS FIRST DEFINED IN OUR 2009 SUSTAINABILITY REPORT.

**R**esource renewal is about turning waste into resources. It is what we do when we partner with our customers to find practical ways to harvest value from discarded materials.

With resource renewal, we help to convert society's current linear system of resource extraction-and-disposal into a cyclical system in which eventually there are no wastes; there are only resources.

We humbly acknowledge that we cannot create this transformation overnight, nor can we create it alone. Such a shift requires a thoughtful policy framework and the active collaboration of players throughout the global supply chain, including: manufacturers who insist on responsibly harvested raw materials, designers who craft products for durability and recyclability, and consumers who respectfully handle and care for the products they buy.

Although this cyclical resource economy is still in its infancy today, with this report we are proud to provide a few case studies that show that resource renewal is possible. See page 38 for more.

## The Zero Waste Cycle



*“There are no benign technologies that take away all of the results of our activities as human beings. One doesn't have the God-given right to consume the world's resources with no consequences for what we're doing. You don't exist to do anything from a socially responsible standpoint unless you're a profitable company. So, we have to be capitalists to survive, but that doesn't mean that's all we have to be.”*

– John W. Casella,  
*Creating Excellence Magazine, September 1990*



# OUR JOURNEY & APPROACH

LIKE SO MANY OTHERS, WE OPERATE IN A DYNAMIC INDUSTRY THAT IS IN TRANSITION. SOME OF THE MAJOR ISSUES CURRENTLY AFFECTING THE WAY WE RUN OUR BUSINESS INCLUDE:

- Global trends in population and economic development are placing mounting pressure on natural resource supply chains. For both environmental and economic reasons, the world needs high quality recycled commodities to minimize our reliance on virgin resources.
- The mix of material in the disposal stream has shifted. We are seeing less paper and a wider variety of plastic packaging in the recycling stream. In general, we are seeing a larger ratio of industrial material entering the disposal stream, and less municipal material due to local recovery efforts.
- The economic and environmental viability of the Waste-to-Energy (WTE) incineration model is coming into question, leaving communities to decide whether to enter long-term agreements with WTE suppliers, or pursue alternatives.
- State-level decision-makers are passing new rules in hopes of creating environmental benefits, economic efficiencies, and green jobs. Vermont's Act 148 Universal Recycling Law and Massachusetts' new commercial organics ban are examples.
- Customers want more than just reliable, safe, and compliant solid waste service; they are looking for partners to help them meet recycling goals and a new professional services model that includes access to data, recycling options for more of their waste streams, and low carbon disposal options.
- The most progressive customers are taking a sophisticated approach that looks beyond the solid waste budget line-item to recognize and invest in the full value creation possibilities of holistic resource management.

Against this evolving backdrop, we have gravitated toward a strategic approach that emphasizes:

1. Listening to customers to deeply understand their service needs.
2. Drawing upon our operational expertise and knowledge to solve pressing problems.
3. Applying our expertise in commodity markets to help customers capture value from their waste.
4. Deploying solutions that are flexible and responsive to customer needs.

The approach is customer- rather than technology-centric. Instead of a one-size-fits-all, build-it-and-they-will-come approach, it is adaptive to evolving local needs. The resulting solutions and expertise leave us uniquely positioned to deliver shared environmental and economic value to our customers and communities, which in turn positions our company to thrive in the post-disposal, resource renewal economy.

## Shared Responsibility for Social Good

We believe that the services we provide and the investments we make in managing and renewing resources must be economically sustainable as well as environmentally sustainable. One cannot exist without the other.

We also believe that recycling is part of a larger and more crucial set of challenges facing society and the planet. We are — we believe — entering an era of constraints and limits in nearly all areas of human activity, including energy, climate, and natural resources.

In this belief, we are optimists. These challenges represent significant opportunities for innovation, creativity, economic growth and security, environmental stewardship, and quality of life for future generations. These challenges also demand major shifts in thinking, particularly around how and why we shape public policy, how and why we pay for resource renewal, and how and why we place a value on it — for ourselves, our children, and our society.

The economics around many of our most pressing resource challenges — energy, climate, etc. — remain underdeveloped and in need of transformation. Recycling, for example — and its widening contribution to resource sustainability — is one of those challenges.

If our goal as a society, and as a planet, is to address the challenges of resource limits, and to build a sustainable way of life, are resource renewal services like recycling worth paying for? Is recycling worth investing in for the short- and long-term social, economic, and environmental value it creates? What responsibility does each of us have to contribute to its economic sustainability so we continue to enjoy its environmental sustainability?

Our goal — in fact, our responsibility — is to lead that conversation with our stakeholders, public policymakers, and our customers.

## SECTION 1

# OUR SERVICES

## RESOURCE SOLUTIONS FOR OUR CUSTOMERS

**P**artnering with our customers around Resource Solutions is the number one way we can help protect the environment, support our communities, and build our business. In Section 2 you will find a discussion of the many important improvements we're making to our own operations, but our true sustainability sweet spot is where we combine our efforts with those of our customers, so this is where we begin our report.

Nationwide, about 35% of the municipal solid waste stream is recycled and 65% is disposed. This is according to EPA reporting, which also tells us that a large portion of this disposed material could have been recycled using traditional recycling technology. Another large fraction is organics that could have been diverted via donation, composting, or other forms of organics recycling. In fact, we could drastically improve our national diversion rate by fully utilizing the strategies available to us today.

Some of our customers are well above average with their recycling rates, while others are still building up their programs. To help our customers increase diversion and create value from each component of the waste stream, we offer a suite of services: recycling, collection, organics, energy, and landfills. We describe each of these Resource Solutions in the pages that follow. ♦









# RECYCLING

Since 1977 we have helped to pioneer the field of resource recovery. In 2013, led by our Zero-Sort Recycling facilities, we recovered over 500,000 tons of recyclable materials.

**R**ecycling provides a perfect example of the teamwork involved in successful resource management. Households and businesses do their part to separate recyclable materials from their trash, and we do our part to collect, sort, and process them into high-quality raw materials for manufacturers to use in new products. Recycling works best when we all play our parts well.

Our Zero-Sort® Recycling solution continues to thrive and grow. Our customers, with businesses to manage and households to run, appreciate the simplicity and convenience of putting all of their recyclables into a single bin. It helps them to recycle more materials more often. We see this across many types of customers. Municipalities that switch to Zero-Sort Recycling see a rise in recycling rates and a drop in disposal quantities. For example, after adopting Zero-Sort Recycling, the City of Boston increased its recycling rate from 9% to 20%. Businesses and institutions

see similar benefits. A great example is Dartmouth College, which increased its recycling capture by 50% in part by switching to Zero-Sort Recycling.

We are extremely proud of our customers' success stories in increasing their recycling rates. And for us, this is just where the story begins. Zero-Sort Recycling is about much more than just maximizing the amount of material entering our customers' recycling bins. The rest of the Zero-Sort Recycling story is where we safely and efficiently sort and process these recyclables into high quality raw materials and deliver them to manufacturers throughout North America and the world.

At our six Zero-Sort Recycling facilities throughout the northeast, we take mixed recyclables and sort them by material type.



- 1 Recycling Collection**  
It starts with you tossing items like newspapers, boxes, bottles, and cans into your recycling bin. We pick these materials up from your home or business and take them to be processed at a Zero-Sort Recycling facility.
- 2 Zero-Sort Recycling Facility**  
At the recycling facility we sort and bale commodities like aluminum, cardboard, paper and more. These serve as the source material for recycled products and packaging.
- 3 Manufacturing**  
Baled commodities are received by manufacturers as raw materials for making new goods.
- 4 New Products**  
Completing the loop, the recyclables you placed into your bin are transformed into new products like boxes, bottles, cans, packaging and even fleece jackets!



This year we demonstrated our ongoing commitment to recycling with two big projects: building a brand new Zero-Sort Recycling facility in Lewiston, ME, and renewing our operating contract at the newly upgraded recycling facility in Chittenden County, VT.

**Lewiston, Maine:** This summer we invested millions to construct a new Zero-Sort Recycling facility in Lewiston, ME. The operation is housed in a 15,000 square foot addition onto the City’s existing solid waste transfer station. The facility will initially process 30,000 tons per year of mixed recyclables

from communities throughout mid- and northern-Maine. A full build-out the facility will be able to process up to 75,000 tons per year.

**Chittenden County, Vermont:** Since 1997, we have operated the Chittenden County Solid Waste District’s recycling facility near Burlington, VT. This summer, the District invested \$1.7 million in several upgrades to their system, which can process roughly 45,000 tons of recyclables per year. Under a recently extended contract, Casella will continue to operate the facility until 2022.

**OUR GOAL** Recycle 1 Million tons per year of recyclables and organics.

## Continuous Improvement: A Focus on Quality

Our goal with recycling is to produce high quality materials that manufacturers actively seek out for their products. We take pride in the quality of our recycled material, and to protect it, we are willing to invest considerable time and energy. This is an essential component of building a thriving recycling industry.

One challenge that all recycling facility operators face is the presence of residue, or non-recyclable materials, mixed in with the inbound recyclables. Residue can diminish the quality of the recycling stream, impede sorting processes, increase operating costs, and potentially damage processing equipment or put facility employees at risk. Residue occurs when generators don’t know what belongs in their recycling bin or don’t appreciate the importance of proper sorting.

We have always worked to keep our residue rates low, by educating our customers when they make the switch to Zero-Sort Recycling and providing them with educational handouts and signage. This year we are enhancing this effort by establishing an open dialogue to help customers understand the importance of good sorting. To learn what materials are recyclable in your area, please visit our website, [casella.com](http://casella.com).





# RECYCLING

(CONTINUED)

## Building a Sustainable Recycling Industry

Recycling is a cornerstone of sustainability. It benefits the planet twice: first by reducing waste disposal and second by alleviating pressure on natural resources. When someone wants to improve the environmental impact of their business or household, recycling is often the first step they take.

Still, society is not recycling enough. Diversion rates in the United States have stagnated, and disposal audits consistently show large percentages of recyclables in the trash. Some blame society's laziness or apathy, but the problem is not solely cultural; it is also economic. The business model of recycling remains overly reliant on volatile commodity markets and is sorely in need of transformation.

### Recycling is Not Free

At first glance, recycling has an enticing business model, in which recyclers get paid twice for the material they collect. Generators pay to have stuff taken away and then manufacturers pay to purchase that same stuff. Unfortunately, however, these revenues don't reliably outweigh the significant costs of recyclables collection and processing infrastructure.

**The downside of the recycling business model is that it is exposed to global commodity markets, which are volatile (see Figure 1 on page 13).** Several times in recent history, recycling revenues have declined below the levels required to recoup collection and processing costs and investments. In short, recycling periodically becomes unprofitable and does not deliver an appropriate return. This situation deters much-needed further investment in recycling infrastructure.

The fundamental - and ironic - problem is that, despite the high social and environmental value that we place on recycling, society has saddled it with the unrealistic expectation that it should be free. **Recycling is not free. Collecting and processing recyclables requires significant up-front investments and ongoing operational costs. It requires a vast new physical infrastructure.** No one expected highway networks or indoor plumbing to be free; why do we think differently about recycling? **The unrealistic expectation that recycling should be free effectively stacks the deck against recycling, and it is time for society to address this problem head on.**

### Entering a New Era

We believe that the "recycling is free" myth has prevented society from fully unlocking the power of markets to support a thriving and resilient recycling industry. The six strategies presented below will begin to change this. **Over the coming months and years, Casella will work with its many partners to imagine and build a new recycling industry that is both environmentally and economically sustainable.**

### Six Strategies for Success



**1** Cleaning up the recycling stream through generator outreach and education, to minimize residue



**2** Improving the efficiency of recyclables collection and processing



**3** Solving the issue of glass, which is problematic in residential and commercial recycling programs



**4** Partnering with our customers to fairly distribute the risk and rewards associated with recycling



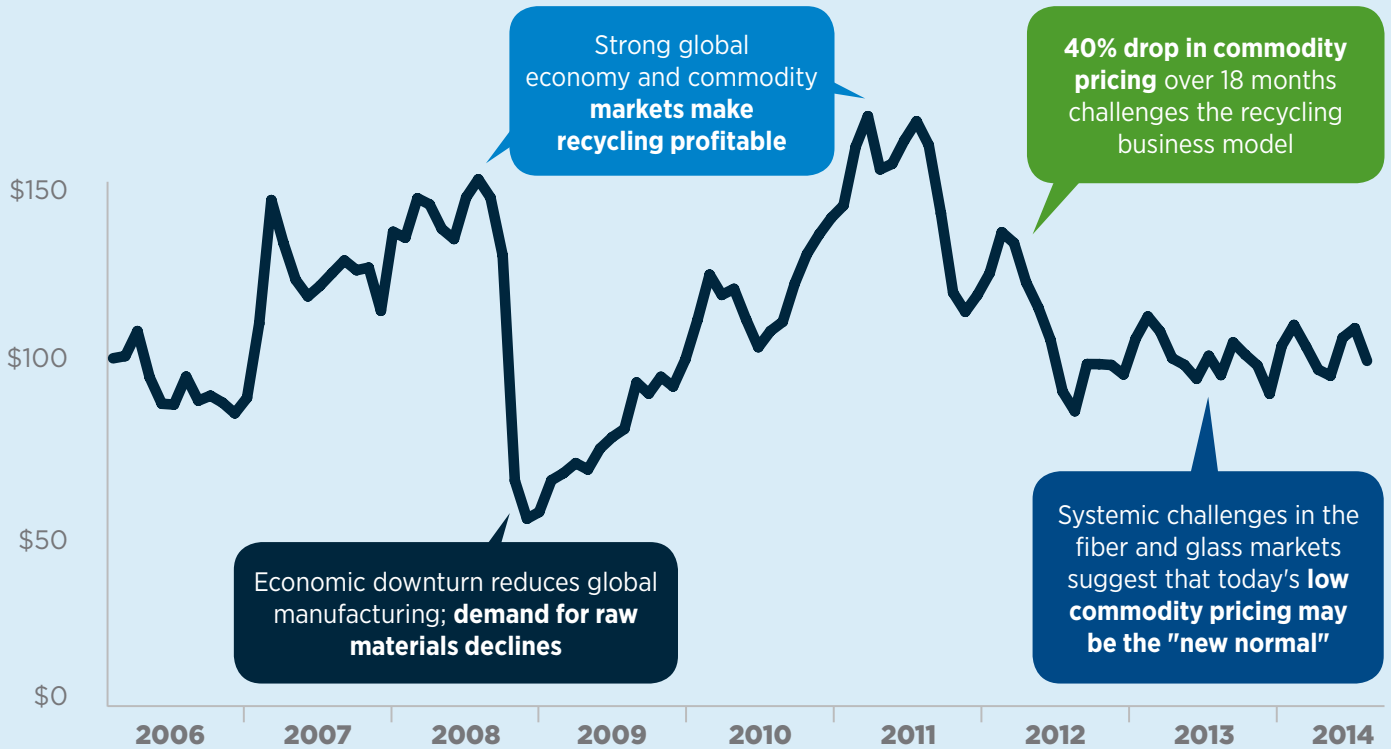
**5** Working with our customers to advance a "design for recycling" approach to products and purchasing



**6** Working with policymakers to rethink old policies and promote new ones that improve the efficiency and effectiveness of recycling

# Significant Trends in Commodity Pricing

The Average Commodity Revenue (ACR) per ton is what we are paid for our sorted and processed recycled commodities. Fluctuations and declines in the ACR disrupt and deter further recycling investments.



(Figure 1)





# COLLECTION

In 2013, we provided safe, reliable, and environmentally-sound waste and recycling services to over 170,000 businesses, institutions, and municipalities throughout the northeast.

**S**ustainable resource management would not be possible without safe and reliable collection service. We operate a network of refuse collection fleets extending from western New York through Northern Maine, which includes over 700 collection vehicles.

Our fleet of on- and off-road vehicles consumes nearly 6 million gallons per year of diesel fuel, which is expensive and produces emissions. We therefore have a strong environmental and financial incentive to reduce our dependence on diesel by running a more

efficient vehicle fleet. Our improvements for the coming years will include modernizing our fleet and using alternative fuels such as CNG and biodiesel in select markets.

Across the company, we continue to modernize our fleet by retiring older vehicles and replacing them with newer, more efficient vehicles. These improvements will increase our overall operating efficiencies, reduce our emissions, and provide our operators with better tools to do their work.



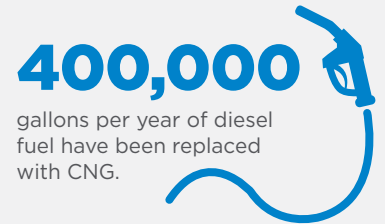
# Alternative Fuel Consumption



**Compressed Natural Gas**



We now have a total of 35 CNG collection trucks operating in Burlington, Vermont and Ft. Edward, Geneva and Horseheads, New York.



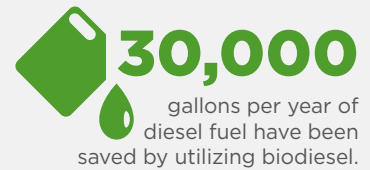
**400,000** gallons per year of diesel fuel have been replaced with CNG.



**Biodiesel**



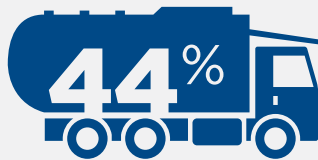
Our Portland, Maine location currently runs their entire fleet of collection vehicles on a 20% blend of locally produced biodiesel.



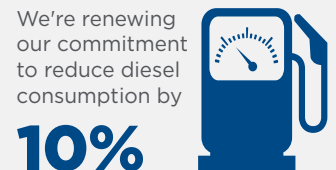
**30,000** gallons per year of diesel fuel have been saved by utilizing biodiesel.



**Continuous Improvements**



The Fleet Department is testing hydraulic hybrid launch trucks that use 44% less diesel than current models along with a fuel saving technology that could make each truck 10% more fuel efficient.



We're renewing our commitment to reduce diesel consumption by **10%**

We have also begun to run a portion of our fleet on compressed natural gas (CNG), which has a lower carbon footprint, emits less local air pollution, and runs more quietly than diesel. Today, we are running 35 CNG-fueled refuse and recycling vehicles out of our divisions in Burlington, VT, Fort Edward, NY, Geneva, NY, and Horseheads, NY. In 2013, these vehicles allowed us to replace nearly 400,000 gallons of diesel fuel with CNG.

In Portland, ME, our customers help us fuel our trucks. Here's how it works: several of our restaurant customers in Portland set aside their used vegetable oil for recycling. Maine Standard Biofuels pays them for the oil, which they collect and refine into biodiesel. We then buy and blend the fuel into our tanks to replace a portion of our diesel usage. Our Portland fleet runs on 20% biodiesel, and saved about 30,000 gallons of regular diesel last year.

In addition to these measures, we are conducting demonstration tests to evaluate the cutting edge new technologies of the future. One such demonstration will be a hydraulic hybrid launch truck, which is estimated to consume 44% less diesel than current 2010 diesel technology. Another demonstration project will assess a fuel saving technology that manages engine power to optimize fuel efficiency and performance, with fuel economy benefits of up to 10%.





# ORGANICS

We transform traditional organic waste streams including food scraps, wood ash, paper mill by-products and biosolids into nutrient rich earthlife® soil amendments and now renewable energy. In 2013, Casella recycled over 400,000 tons of organic materials.

Organics recycling is nature's original form of recycling, and the practice is as old as life on earth. Within the municipal solid waste (MSW) stream, organics include food scraps, yard debris, and soiled paper. Beyond the MSW stream, the category includes things like wastewater treatment biosolids,

food manufacturing by-products, animal manures, paper mill residues, wood ash, and other mineral residuals. We work to recycle these materials and return their value to the soil through composting, anaerobic digestion, land application, and other methods.



**Composting:** Our Hawk Ridge Compost Facility in Unity, ME produces compost from wastewater treatment plant biosolids and other organic residues. In 2013, the facility composted over 40,000 tons of inputs into high quality earthlife® brand products, which help to replenish soil nutrients and soil structure on cropland and landscapes throughout the northeast.



**Anaerobic Digestion:** We are a proud partner of AGreen Energy LLC, which builds and operates anaerobic digesters on dairy farms in New England. In 2013, as operator of the AGreen facility at Jordan Farm in Rutland, MA, we digested cow manure and roughly 17,000 tons of liquid food processing residuals, to produce over 1.5 million kilowatt-hours of renewable electricity and over 2 million gallons of fertilizer for the farm's crop land. This year, through our role in BGreen Energy LLC, we began operating a 2nd digester at Barstow's Longview Farm in South Hadley, MA.



**Alkaline Stabilization:** Our new Grasslands facility in Chateaugay, NY uses an innovative alkaline stabilization technology to prepare wastewater treatment solids for agricultural land application. The facility serves municipal customers in NY, VT, and Canada. At full capacity it will process 50,000 tons per year, allowing valuable soil nutrients to be safely returned to local cropland.



**Land Application:** Certain organic residuals require no further processing before they are returned to agricultural land for their nutrient value. For example, one of our customers is a brewery in upstate New York whose residuals are already fit for use on crop soils, and need only one of our project managers to match them up with an appropriate field for spreading each year.



## earthlife® Products

By applying innovative science and technology, we transform organic residuals into value added products suited for the landscape, horticultural, and agricultural markets, which we sell under our earthlife® brand name. The earthlife brand encompasses over 40 unique products and blends suited to a wide variety of applications designed to improve soil health and productivity. For example, earthlife compost is widely used by transportation departments along roadways to enhance slope stabilization, control erosion, and support healthy vegetation growth. Our Fertilimer product is preferred by farmers to optimize pH, improve soil nutrient levels, and enhance crop yields. And our Nutri-Mulch product has a strong following among landscapers and garden supply companies.



# Food Scraps

We started collecting food scraps from restaurants and grocery stores in Burlington, VT in 1999. Today we are collecting roughly 3,000 tons per year of food scraps for recycling, servicing nearly 200 customers in select markets in Vermont, Massachusetts, and New York. In the coming years we intend to grow this line of business.

Recently, two states within our operating footprint - Vermont and Massachusetts - passed new rules requiring the diversion of food waste from disposal. In both states, we participated throughout the rulemaking process, serving on advisory panels, submitting data and comments, and providing general support to ensure the rules were crafted in a practical and sustainable manner.

In addition to supporting new public policy mandating organics recycling, we have been actively evaluating and developing economical strategies for collecting and diverting food scraps. We encourage our customers to measure their food waste and find ways to waste less and donate more. Then we work to collect and capture the nutrient and energy value of whatever is leftover.

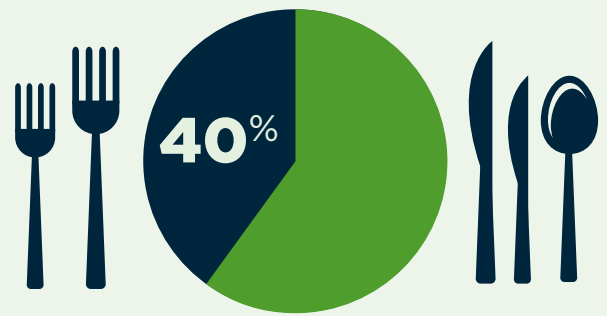
At the **University of Vermont**, facilities staff place their source separated organics into wheeled 32- or 64-gallon carts and we deliver the material to a local compost facility. This is the type of service most of our commercial food scraps customers receive.



This year, a grocery store in Massachusetts began grinding its food scraps into a liquid feedstock perfect for producing energy and fertilizer in the **Jordan Farm anaerobic digester** that we operate. Using a grinding station in the back of the store, and a slurry storage tank next to the loading dock, the store is recycling food scraps into valuable soil nutrients and renewable energy. We deliver the slurry to the digester.



## Did You Know?



40% of food in the United States goes uneaten. This is the equivalent to throwing away \$165 billion each year!



Food waste makes up 20% of the municipal waste stream. It's the next frontier in recycling.

In **Tompkins County, New York** we are part of a trial project that offers curbside composting service to 1,200 homes in and around the City of Ithaca. The program provides each household with educational materials, a kitchen caddy, and a 14-gallon wheeled cart. We provide weekly pick-up and take the material to a local composter.



In **Rutland, Vermont** we are preparing to break ground on a pilot facility that will process food scraps into an energy-rich feedstock for delivery to Cow Power farms. The Cow Power program supports renewable energy and local agriculture by paying a premium rate to farmers who produce electricity using on-farm anaerobic digesters. The food scraps grinding project will be supported by a grant from the Clean Energy Development Fund and Green Mountain Power.



# ENERGY

In 2013, we and our partners generated over 229,000 Megawatt-hours of renewable electricity. That is enough to power over 30,000 New England homes. Here are a few of the ways we are capturing energy at our facilities.

## Landfill Gas to Energy

In our landfills, waste gradually decomposes and produces landfill gas, which we can capture and use as a fuel for producing renewable energy. Today, six of our landfills are equipped with landfill-gas-to-energy power plants, and we have three more projects under development. In 2013, these facilities delivered 227,000 Megawatt-hours of electricity to the power grid. Producing power from landfill gas is a double win for climate protection: it keeps heat-trapping methane out of our atmosphere and it replaces fossil fuel based power generation.



## Anaerobic Digestion

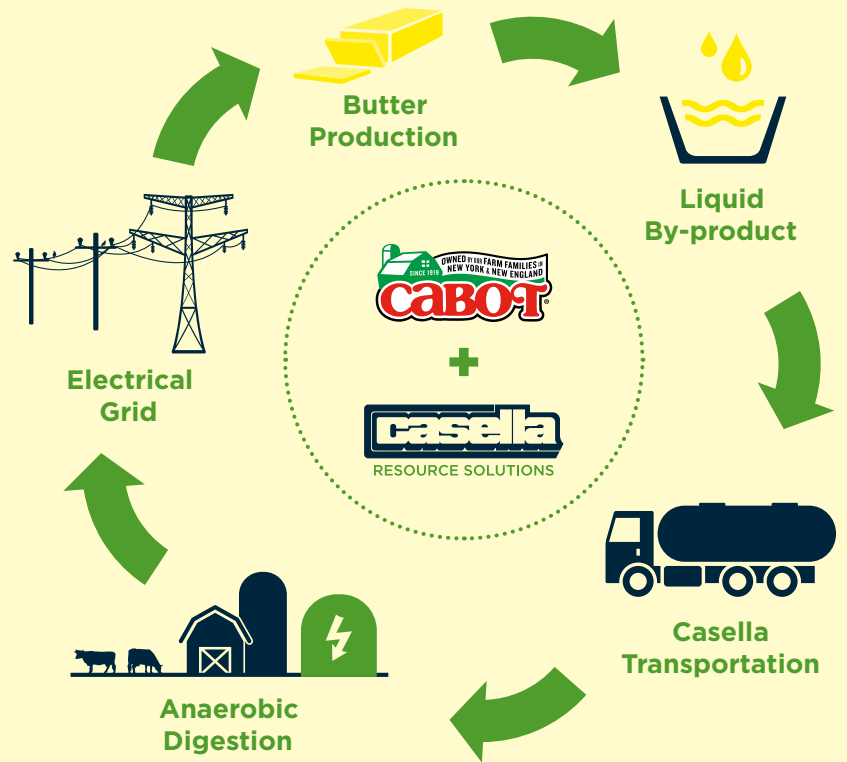
As partners in the AGreen and BGreen Energy projects, we have 800 kilowatts of renewable energy generating capacity at two dairy farms in Massachusetts. Through on-farm anaerobic digestion, we are using renewable resources - cow manure and food processing residuals - to produce enough electricity for hundreds of homes, while also returning valuable organic nutrients to the soil.



## Cabot Creamery Closed Loop Recycling System

Cabot Creamery is a cooperative of 1,200 dairy farm families, with four dairy processing facilities in upstate New York and New England. A long-time Casella partner, Cabot is dedicated to sustainability and always ready to collaborate on innovative new resource solutions. Most recently, Cabot's creamery facility in West Springfield, MA began pioneering an exciting new closed-loop solution for organic dairy by-products. Casella delivers the material to Barstow's Longview Dairy (a Cabot member farm), runs it through the BGreen Energy anaerobic digester, and creates electricity for the power grid, which Cabot then purchases to operate their creamery. Now the equivalent electricity needed to churn Cabot's butter at the West Springfield facility comes from Barstow's Longview Farm.

*We take pride in working with our partners to discover environmentally and economically sustainable ways to capture renewable energy value from society's waste streams.*

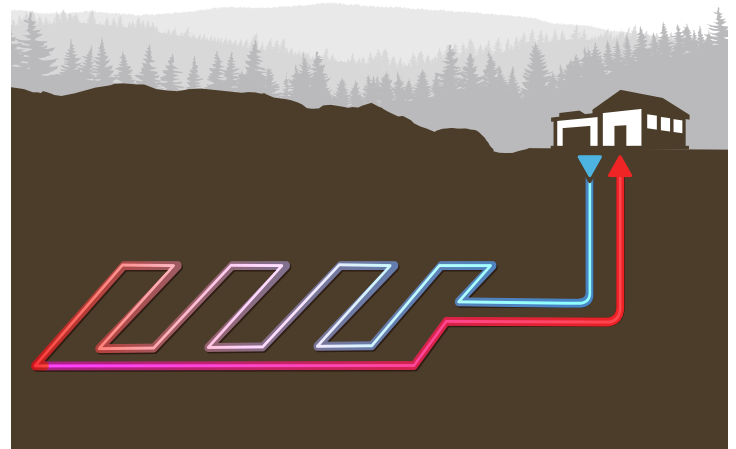


## Landfill Solar Farm

We envision our landfills evolving into multi-use renewable energy parks, and we actively invest our time and resources to make this vision a reality. Building upon incentives we were able to secure through the Vermont SPEED program, Borrego Solar Systems, installed a 12-acre solar photovoltaic array at our landfill in Coventry, VT. With its 8 Megawatt (MW) landfill gas to energy plant (owned by Washington Electric Cooperative) and this new 2.2 MW solar facility, the Coventry site is helping to diversify and localize Vermont's energy supply.

## Landfill Heat Recovery

This February, our North Country landfill started using geothermal loops to recover landfill heat and warm their maintenance shop. Shutting down their oil burner saves them thousands of dollars per year, reduces their exposure to fluctuating fuel costs, and cuts their carbon footprint. The project is thought to be the first of its kind in North America. The site's engineering consultants, CMA, received an award from the American Academy of Environmental Engineers and Scientists for their involvement.





# LANDFILLS

For discarded materials that cannot be renewed, our modern disposal facilities are well-designed, well-run, and well-equipped to accept these items in an environmentally safe and secure manner.

## Does a Resource Renewal Company Still Need Landfills?

**A**s of Fiscal Year 2014, solid waste disposal is an important source of revenue for our company, and one of our near-term strategic goals is to get more tons into our landfills. Do these facts contradict our sustainability vision and strategy? We don't think so. Here's why:

**First.** Our customers need and expect integrated solutions. They have businesses and households to run, and although we're all working together to figure out how to reduce, reuse, and recycle more, just about all of us still have waste to dispose. The simple reality is that our customers need disposal solutions to go along with their recycling solutions, and we can serve them best by offering both.

**Second.** There are some materials that society just hasn't figured out how to recycle yet. When most people think about waste, they picture household and business garbage. But much of the material coming into our landfills consists of industrial residuals, sludges, soils, and ashes that currently don't have a higher and better use. Until better solutions emerge for these types of materials, they need to be safely and securely disposed.

**Third.** There are times when the protection of human health and the environment demands the availability of quick and reliable disposal options. During natural disasters such as floods and hurricanes, our communities rely upon us to manage large volumes of unrecyclable debris as part of the round-the-clock emergency effort to clear streets, repair infrastructure, and bring critical support services back to local citizens in need.

**Finally.** Some of our best closed loop solutions began as disposal streams coming into our landfills. When a new disposal stream begins arriving at our facilities, it enters the crosshairs of our resource management specialists. We learn its consistency, production volumes, and handling needs. And, perhaps most importantly, we begin developing relationships with its generators. All of this sets us up to turn today's disposal stream into tomorrow's closed loop success story.

For each of these reasons, we know that we are much more than just a "waste company" and we sincerely believe that our strategic disposal goals are aligned with our broader resource renewal vision.



## Safe and Secure Landfills

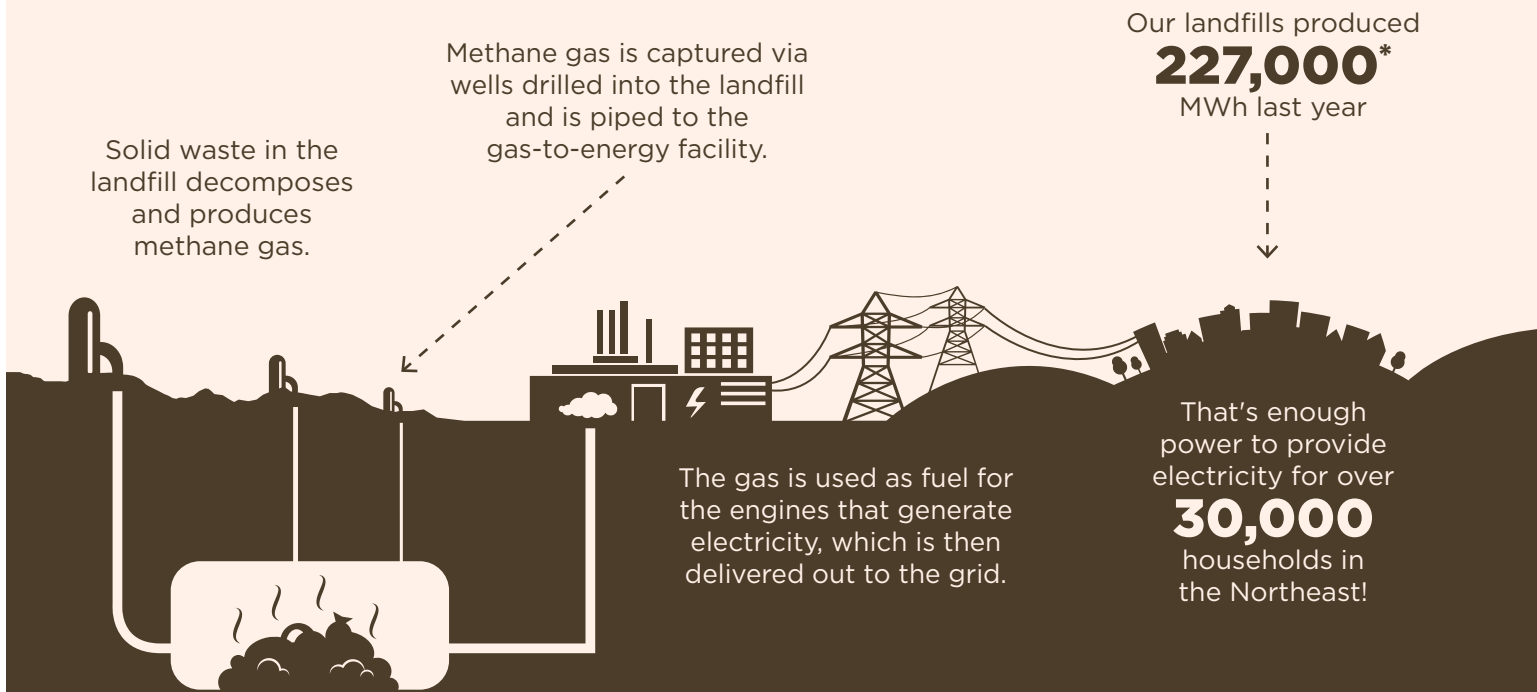
Growing numbers of our customers are actively working to achieve zero waste. With a deep commitment to waste reduction and recycling, these customers are drastically reducing the discards that they need to dispose. Still, these customers and others continue to call upon us to provide safe, secure, and affordable disposal options with the smallest possible environmental footprint.

We design, build, and operate our landfills to minimize the impact of solid waste on the local and global environment. Our landfills adhere to best management practices, such as:

- Screening incoming loads to ensure that only acceptable solid waste is placed in our landfills.
- Using double liner systems to capture leachate (the moisture that percolates out of the waste mass) so that it can be properly treated.
- Optimizing waste compaction rates so we can use existing landfill space as efficiently as possible.
- Installing landfill gas collection systems to capture and control air emissions. For more on this, see page 22.



## Landfill Gas-to-Energy Production



\* This includes all electricity produced by us and our partners at Casella-operated landfills.



# LANDFILLS

(CONTINUED)

All of our disposal facilities have begun working to exceed regulatory standards and industry practices as part of our **Low Emission Landfill** initiative. This effort consists of developing a series of best practices designed to optimize landfill gas capture and enhance environmental performance, including:

- Commencing gas collection early by operating horizontal gas collectors in active cells.
- Using low permeability soils and/or geomembrane cap to enhance gas capture in intermediate cover areas.
- Monitoring and tuning the well-field more frequently to ensure optimal gas collection.
- Developing landfill gas to energy projects to capture energy value from discarded materials. Six of our landfills now capture gas for electricity production.

As a result of our Low Emission Landfill efforts, our company-wide average landfill gas capture efficiency (according to EPA Part 98 calculations) in 2013 was 84.5%, well above the widely-cited industry average of 75%. This directly benefits our emission rate, which is significantly lower than that of other disposal facilities in our region, as described on the adjoining page.

As landfill operators, we must continuously adapt to an evolving field. New technologies emerge, regulations change, and we see variability in the mix of waste types that arrive at our gates. These changes have important implications for our engineering decisions, operating practices, staffing levels, and general facility management. As a company, we are committed to finding effective ways to manage the engineering and environmental challenges at our landfills. To this end, we are working to improve our landfill data management systems to support more data-driven strategic decision-making and proactive environmental management. We will report more on this initiative in our next report.

We see our Low Emission Landfill initiative as a pathway to continuous improvement, and we know our journey is far from complete. In the coming months and years we will work to continue advancing our operating practices to further enhance our gas capture and recovery rates.



# Zero Waste or Zero Landfill?

Many businesses and municipalities have defined recycling goals that aim for “zero”, but perspectives differ on exactly what zero means. Some promote a Zero Landfill approach which doesn’t necessarily maximize diversion through reuse, recycling, or other forms of recovery. Others support a more ambitious Zero Waste concept that envisions the elimination of all waste. To better understand the distinctions between Zero Waste and Zero Landfill, it helps to de-bunk a few myths:

## Myth 1

### Waste-to-Energy is Better for the Climate

Most people don’t realize that greenhouse gas (or carbon) emission rates vary tremendously among disposal sites, and it’s simply not possible to say that one type of facility is always better than the other. Figure 2 shows that, in the northeastern U.S., the average landfill emits less greenhouse gas than the average waste-to-energy facility, and that emissions from Casella landfills are lower still.

## Myth 2

### EPA Ranks Waste-to-Energy above Landfilling

The EPA used to advocate a waste hierarchy that ranked waste-to-energy incineration above landfilling. This dates back to the late 1980s when landfill gas collection was uncommon, and few landfills captured landfill gas for energy. In 2012, based on modern operating practices and data, EPA revised its waste hierarchy to the one shown in Figure 3<sup>1</sup>. The hierarchy no longer places waste-to-energy above landfilling, but instead lists “Energy Recovery” above “Treatment & Disposal”. In this manner, a landfill with energy recovery is ranked in the same tier as an incinerator with energy recovery.

## Myth 3

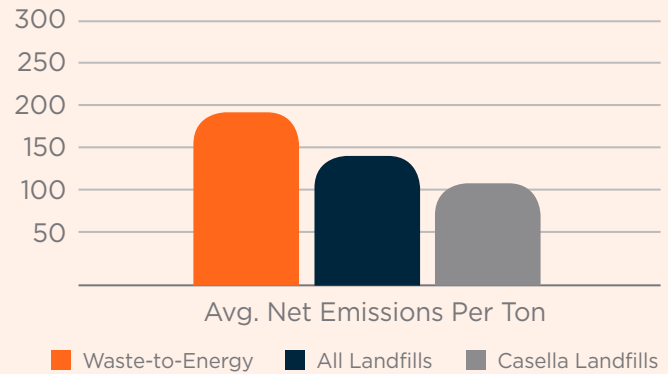
### Waste-to-Energy is a type of Recycling

EPA’s waste hierarchy reminds us that source reduction and recycling should always be our highest priorities. Facilities that pursue Zero Landfill through incineration can undermine recycling and related diversion opportunities. For example, Waste-to-Energy facilities have no incentive to find solutions for hard-to-recycle plastics, because plastic is a key ingredient in incineration power production. But plastic is a petroleum-based product; when combusted for energy, it is a fossil fuel. From a climate perspective, there is no question: true recycling means getting those carbon molecules into new products, not combusting them to raise carbon dioxide concentrations in our atmosphere.

Zero Waste challenges us to keep working until all of the materials we manage are out of the disposal stream. As a society, we could settle for Zero Landfill, but if we’re serious about protecting the climate, closing resource loops, and achieving true sustainability, we have to set the higher standard: Zero Waste.

### 2012 Greenhouse Gas Emission Rates from Large Disposal Facilities in the Northeast

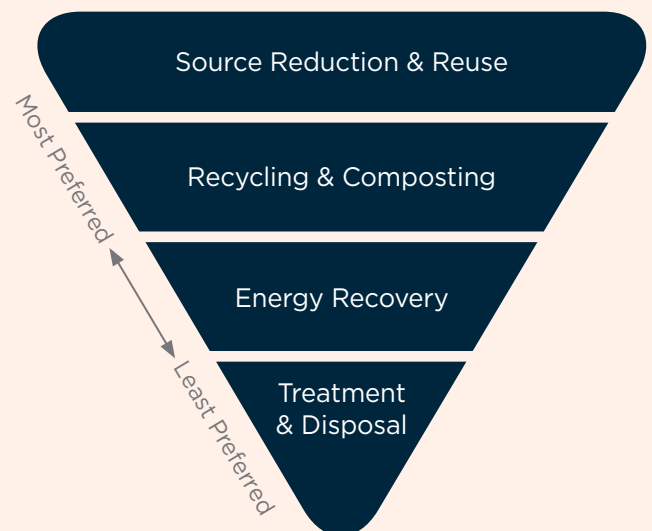
(kgCO<sub>2</sub> per ton waste disposed)



*EPA data show that, in the northeast, incinerators emit more greenhouse gas per ton than landfills do, even after accounting for energy production.*

(Figure 2)

### U.S. EPA Waste Management Hierarchy



*EPA updated their waste management hierarchy to clarify that waste-to-energy incineration is not ranked above landfill gas to energy.*

(Figure 3)

<sup>1</sup> Accessed most recently on July 10, 2014 at <http://www.epa.gov/waste/nonhaz/municipal/hierarchy.htm>

# RESOURCE SOLUTIONS: BRINGING IT ALL TOGETHER

OUR RESOURCE SOLUTIONS APPROACH FOCUSES ON DELIVERING VALUE TO LARGE AND COMPLEX ORGANIZATIONS SUCH AS UNIVERSITIES, HOSPITALS, MANUFACTURERS, AND MUNICIPALITIES.

**R**esource management (RM) practices have been widely adopted for years in the industrial sector, driven by cost savings, lean manufacturing, and sustainability goals. Casella leverages these best practices and lessons learned to deliver valuable solutions to customers in the many markets that we serve.

Recognizing that there is no one-size-fits-all program, we create tailored solutions to suit the unique needs of each customer.

Our methodical Resource Solutions approach applies our knowledge and experience in recycling, collection, organics, energy and landfills to deliver measurable economic and environmental return for our customers.

This professional services approach is in contrast to traditional waste management and is designed to deliver operational efficiencies, resource conservation and other forms of value.

## The Resource Solutions Approach



### Holistic Strategy

Recognizing that most of our customers' waste-related costs are incurred before the material becomes waste, we seek value from the "point of generation" all the way through to end processing or disposal.



### Re-thinking Waste

We apply the science of resource management to help customers adjust their waste streams in ways that make them suitable for higher and better uses. This includes re-designing products to enhance their recyclability or eliminating toxic substances so waste streams can be redirected to beneficial uses or low emission landfills.



### Evaluation and Baseline

We inventory each new customer's existing services, equipment, and volumes. This provides a baseline against which to measure progress, and suggests areas to improve efficiencies, reduce waste, and create value.



### Education, Training and Marketing

We engage internal and external stakeholders in outreach programs to drive behavioral change.



### Technology and Innovation Programs

We leverage new and existing technologies, as well as innovative RM programs, to reduce disposal volumes and create value.





### **Strategic Sourcing and Third Party Management Services**

We work with hundreds of qualified environmental service providers across the US to deliver a wide range of environmental services.



### **Dedicated Customer Service and Support**

Our central support team provides customized and direct customer service to thousands of locations serviced across most of the US.



### **Supporting Current Infrastructure and Initiatives**

We work closely with existing recycling and diversion programs to support and build their success.



### **Focus on Health and Safety**

A focus on health and safety complements our customer initiatives.



### **On-Site Personnel and Equipment**

We strategically deploy on-site management and operating staff to act as an extension of our customers' environmental management teams, allowing our customers to focus on what they do best.



### **Aligned Incentives**

We are committed to structuring transparent win/win agreements with our customers. Such agreements allow us to leverage our best practices and experience to drive down expensive waste and material handling activities.



## SECTION 2

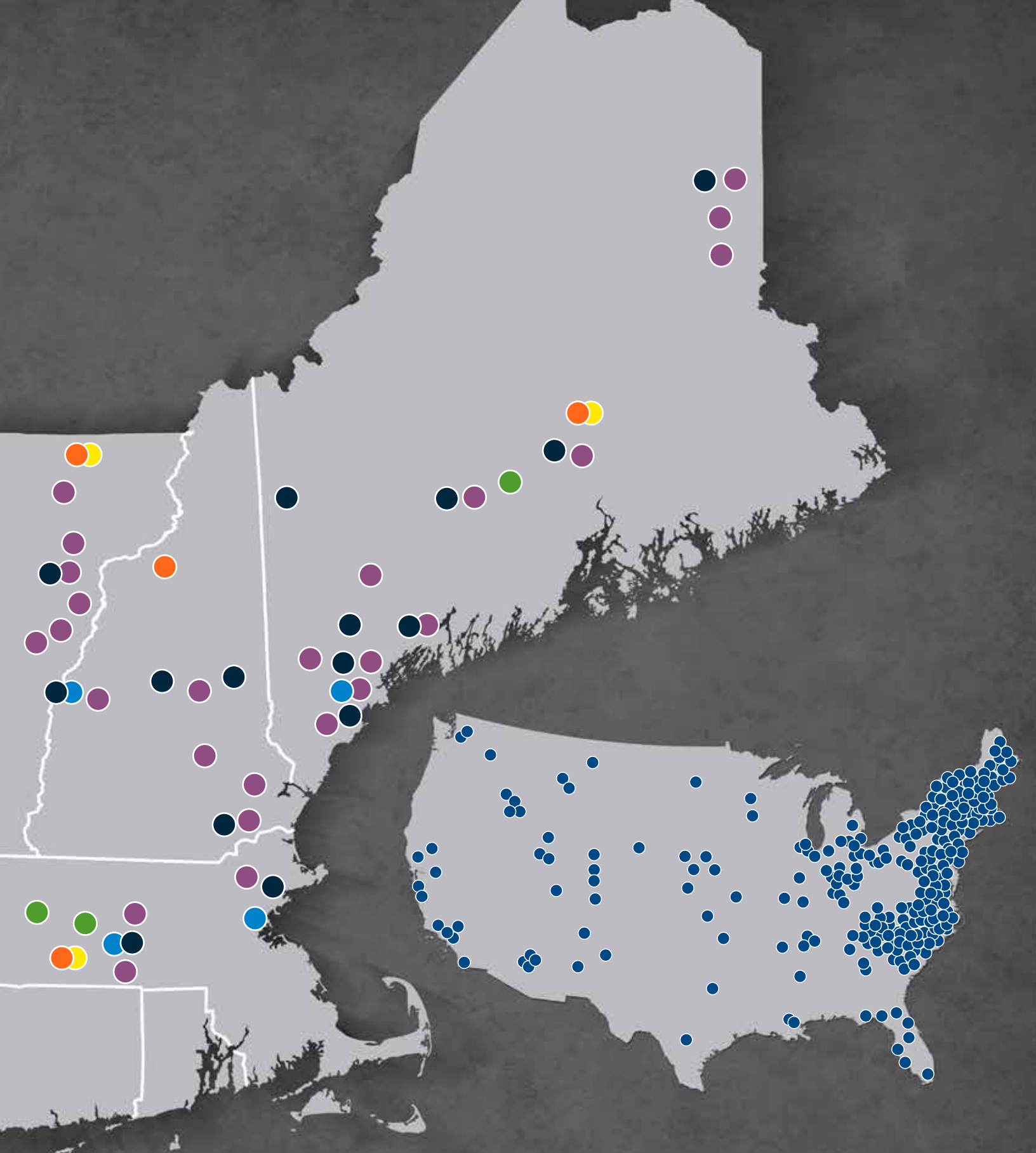
# OUR OPERATIONS

## WALKING THE WALK IN OUR FLEET AND FACILITIES

**T**hroughout the northeast, we operate roughly 100 locations, including vehicle fleets and maintenance shops, transfer stations, recycling facilities, organics processing facilities, solid waste landfills, and administrative offices. Each of these locations delivers valuable resource management services to our customers, while also consuming resources and contributing to our corporate carbon footprint.

The previous section detailed the ways we partner with our customers to improve their environmental performance. In the pages that follow, we will detail the enhancements we are making to improve the environmental performance of our own facilities. These initiatives improve the efficiency of our operations and complement the broader environmental benefits of our resource management services. ♦

- 
- Collection Facilities
  - Recycling Facilities
  - Organics Facilities
  - Landfills
  - Landfill Gas-to-Energy
  - Transfer Stations



● Our Customers

# CARBON FOOTPRINT

WE HAVE BEEN REDUCING OUR COMPANY-WIDE CARBON FOOTPRINT SINCE 2005. IN 2013 WE CONTINUED THAT TREND, CUTTING OUR EMISSIONS BY ANOTHER 175,000 METRIC TONS. COMPARED TO OUR 2005 BASELINE, WE HAVE CUT OUR CARBON FOOTPRINT BY OVER 50%.

The largest emission reduction over the past year came from the closure of our only waste-to-energy incineration facility. The Maine Energy Recovery Company (MERC) facility emitted roughly 100,000 Mg CO<sub>2</sub>e (metric tons of carbon dioxide equivalents) per year. With the closure of the operation at the end of 2012, and full dismantling of the facility over the course of 2013-2014, we eliminated those combustion emissions from our carbon footprint.

MERC processed roughly 200,000 tons of MSW per year, and these tons did not simply disappear with the closure of the facility. Much of this tonnage has been redirected to other landfill facilities, each of which has a lower carbon footprint than MERC in terms of greenhouse gas (GHG) per ton. So the net

impact of the decision to close the facility will be a decrease in disposal emissions.

Additional emission reductions were achieved through continued improvements to the gas collection systems at our landfills, as well as through fuel and energy efficiency measures in our fleet and facilities.

Since joining the voluntary EPA Climate Leaders program eight years ago, we have drastically reduced our overall carbon footprint. We now intend to continue our climate leadership within the industry by turning our attention to smaller emission reduction projects. Our goal will be to reduce the carbon intensity of our operations, as described on the following pages.

## OUR GOAL

Over the next two years, we will focus on reducing our company-wide greenhouse gas emissions per ton of waste received.

We will achieve this intensity reduction goal through a continued focus on:

1. Enhancing gas capture at our landfills.
2. Improving the fuel efficiency of our fleet, and converting from diesel to CNG.
3. Improving the energy efficiency of our facilities.
4. Enhanced measurement and reporting.
5. Employee green teams.

Each of these measures will require some financial and administrative investment, but will deliver payback in the form of reduced operating costs and reduced emissions.



2005  
GHG Footprint



2013  
GHG Footprint



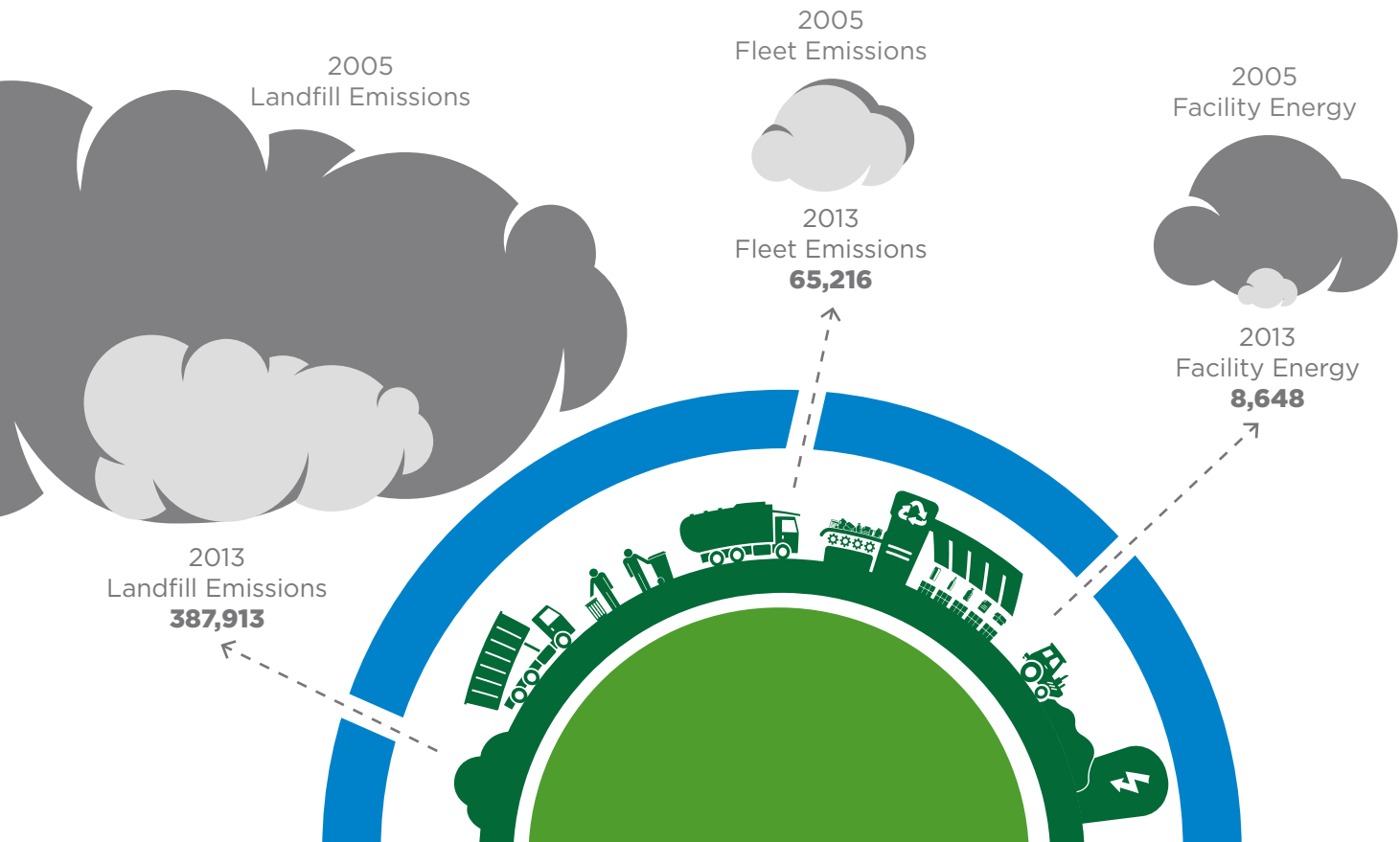
CLIMATE  
LEADERSHIP  
AWARDS



In January 2012, we were recognized by the EPA, the Association of Climate Change Officers (ACCO), the Center for Climate and Energy Solutions (C2ES), and The Climate Registry (TCR) with a Climate Leadership Award for Excellence in GHG Management.

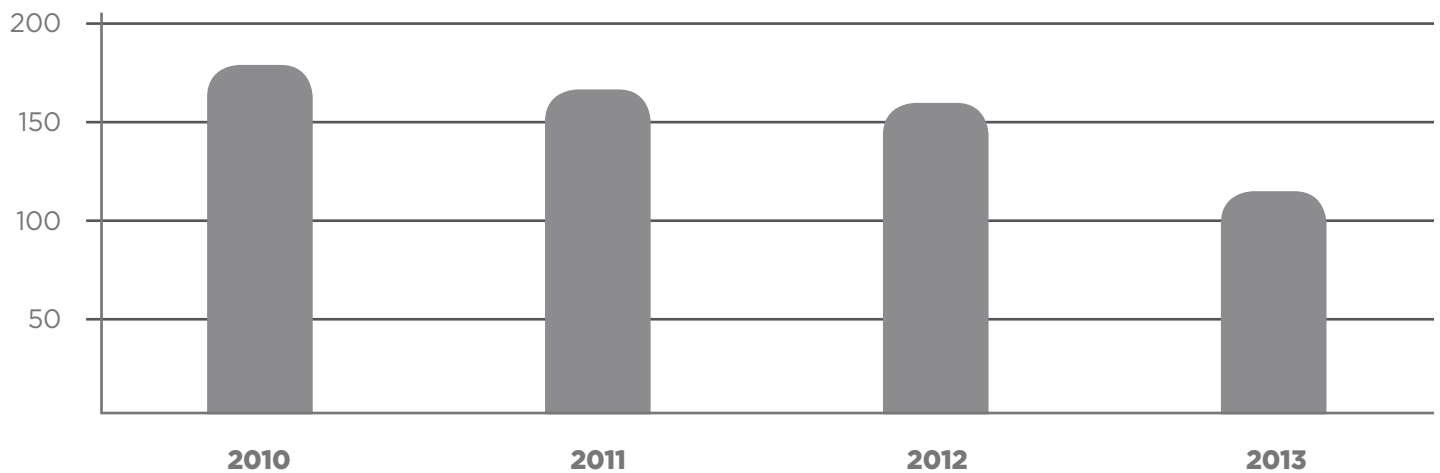
# 2013 Greenhouse Gas Emissions (metric tons CO2e)

Since 2005, we have cut our carbon footprint in half by reducing emissions from our operations. We also benefit the climate by finding new ways to conserve resources through recycling, organics recovery, and energy production. At Casella, protecting the climate means emitting less and recovering more.



## Reduction in Greenhouse Gas Per Ton (kgCO2e/ton)

We have begun to track our greenhouse gas emissions on an intensity basis, or in terms of emissions per ton of material received at our facilities. The downward trend in this chart shows that we have begun to decouple our emissions from our tonnage and business growth.



# Continuing to Improve Our Environmental Impact

Having reduced our carbon footprint by over 50%, we will now focus on reducing our company-wide emissions on a per ton basis. We will achieve this intensity reduction goal through a continued focus on the strategies listed below.



## Enhancing Gas Capture at our Landfills

To minimize landfill gas emissions, we focus on measures that improve the gas capture systems at each of our facilities. These measures include rapidly installing horizontal collectors, strategically employing low permeability intermediate cover, achieving comprehensive coverage with our vertical wells, and keeping our capture and cover systems well-tuned and well-maintained throughout the year. Through these efforts, we strive to exceed industry standards and achieve high capture efficiencies at each of our active landfills. For more information on our Low Emission Landfill efforts, see page 22.



## Fuel Efficiency in our Fleet

The fuel consumed by our fleet of vehicles accounts for roughly 13% of our total carbon footprint, and costs us over \$20 million per year. Improving our fuel efficiency is an important sustainability effort that benefits us both environmentally and economically.

In 2005 we set a goal to reduce our overall diesel consumption by 10% or roughly 580,000 gallons by 2013. In pursuit of this goal we implemented various fuel efficiency measures and began transitioning some of our fleet to run on compressed natural gas (CNG), which is a cleaner-burning alternative to diesel. Our 35 CNG vehicles displace approximately 400,000 gallons of diesel fuel per year, reducing carbon emissions while also improving local air quality.

Despite these initiatives, our fleet efficiency improvements have not kept pace with growth in our collection business, and we have not yet achieved our goal of reducing our overall diesel consumption by 10%.



## Energy Efficiency at our Facilities

Electricity and heating fuel usage at our facilities accounts for 3% of our company-wide carbon footprint and costs us over \$3 million per year. Our facility energy usage makes up a small portion of our overall greenhouse gas emissions, but beyond climate benefits, efficiencies in this area will help to improve local air quality and reduce local operating costs.

In 2009 we set a goal to reduce our electricity and stationary natural gas consumption by 5%. The following measures helped us to make progress toward these targets:

**Natural Gas:** Prior to its closure, the Maine Energy facility consumed over 500,000 therms per year of natural gas. The decommissioning of this facility slashed our stationary natural gas consumption and reduced our total usage by roughly 75%, allowing us to achieve our goal.

**Electricity:** Since 2009, we have implemented efficiency measures such as lighting retrofits and the installation of timers for our vehicle plug-in stations. However these improvements did not keep pace with increases in electricity usage elsewhere in our footprint, so we have not yet achieved our electricity reduction target.

## OUR GOALS

- With this report we are renewing our commitment to this reduce our diesel consumption by 10%.
- As with our diesel goal, we are renewing our commitment to reduce our electricity consumption by 5%.



### Enhanced Measurement and Monitoring

Over the past year, we have migrated our energy and greenhouse gas data to Hara/Verisae’s cloud-based software platform. The system provides an accessible and secure space to store our data, dashboards to explore trends in our energy consumption and emissions, and custom reports to support internal and external communications. We have begun to leverage the new system to support facility-level benchmarking and normalization of data into useful key performance indicators (KPIs). These new capabilities will allow us to identify and prioritize projects to drive further energy savings and emission reductions in the coming years.



### Employee Green Teams

To lead the company toward achieving our sustainable operations goals, we have begun to form “green teams” at select facilities throughout our footprint. These teams will convene quarterly to develop and implement facility-specific strategies for achieving sustainability goals.

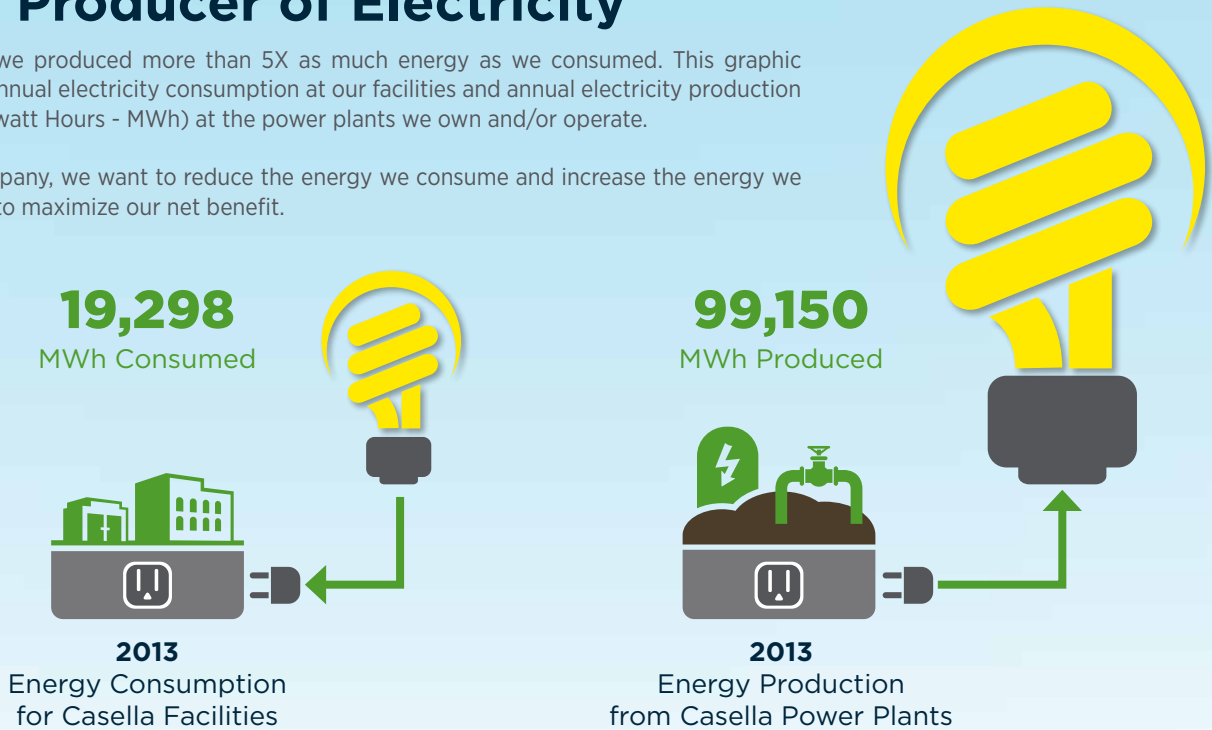
Drawing upon the support of our in-house sustainability team, our energy and emissions database, and local utility and energy efficiency partners, these green teams will lead the company toward a new wave of energy savings, emission reductions, and environmental improvements.

The green team initiative will tap into our local teams’ knowledge and expertise to help achieve our sustainability goals, while also supporting a broader effort to engage and energize employees around our resource renewal vision.

## Net Producer of Electricity

In 2013, we produced more than 5X as much energy as we consumed. This graphic depicts annual electricity consumption at our facilities and annual electricity production (in Megawatt Hours - MWh) at the power plants we own and/or operate.

As a company, we want to reduce the energy we consume and increase the energy we produce to maximize our net benefit.



## SECTION 3

# OUR PEOPLE

## SAFETY, LEADERSHIP, COMMITMENT, AND PARTNERSHIPS

The growth and development of people — *often a cliché in other companies* — has been at the core of our forty-year evolution as a sustainable organization. Our success has been, and is, the direct and indirect result of selecting the most talented, committed people possible, investing in teaching and coaching, and liberating them as leaders to solve problems for our customers and communities at a high level of excellence. Perhaps even more meaningful, this commitment and investment sustained and carried us through tough times as well.

Because we believe we treat this foundation of our business differently than other companies, we measure it through the lens of a journey, and not as a destination to reach, and rest. Our world and our business environment change rapidly. Customer needs and community expectations evolve constantly. New technologies and new opportunities for partnerships and collaborative solutions emerge quickly. We will successfully navigate and thrive in this landscape only through the intentional, consistent investment of company resources in the skills, commitment and problem solving creativity of high-achieving people.

Growing an economically and environmentally sustainable business demands this constant focus, energy and investment in people no less — *and perhaps even more* — than the investments we are making and have detailed in other areas of this report.

The safety, skill, engagement, and creativity of our people is a challenging journey, which cannot be built with just spreadsheets and three-ring binders. As an organization dedicated to service, reaching over 170,000 customers on a regular basis, the talent of our people is an asset we must build with faith, sweat, and courage as well. ♦







## Casella's Core Values

Casella employees make decisions and solve customer problems every day. We make good decisions for our business, customers, and communities when we adhere to our core values, which provide a shared framework within which to apply our individual skills and strengths to solve problems. Our Casella Core Values are as follows:

### SERVICE

**We win when we help others.**

We are willing servants. We are sensitive to needs and are eager to be a resource to everyone around us, being generous with our time, talent and energy.

### TRUST

**We excel when we assume the best in each other.**

Mutual respect and an open, honest environment mark our interactions with others. We acknowledge each other's contributions, we practice active listening, and we deliver on our promises.

### RESPONSIBILITY

**We succeed when we balance our freedom to act with a sense of accountability.**

We invest deeply in creativity, autonomy and the willingness to take risks. We recognize these investments bear the greatest fruit when exercised within a framework of disciplined boundaries.

### INTEGRITY

**We thrive when we do the right thing.**

We believe there are enduring principles for everything we do and we strive, in our words and deeds, to meet or exceed those standards.

### CONTINUOUS IMPROVEMENT

**We prosper when we learn, understand, and improve.**

We create opportunities for human talent to thrive. We share what we've learned. We apply the lessons we learn every day to the goal of getting better and better at everything we do.

### TEAMWORK

**We're more effective when we work together.**

Our impact is consistently stronger when we respect, support and view each other as partners.

## Developing High Impact Leaders



One of our key strategic initiatives is the development of our people. Leadership at Casella is not a word, but a quality we practice with everything we do. In truth, at some level, we are all leaders in our company.

Although some may associate leadership only with managers, everyone at Casella - from the driver and mechanic to the accountant and administrator - leads through the power of example and the ability to solve problems.

We recognize that serving the needs of our customers requires a local focus. Therefore, we have empowered our local personnel with the flexibility to operate independently in their unique markets. To complement this flexibility, we must provide a unified framework for selecting, training, and supporting talented people.

**Selection:** Leadership begins with selecting and hiring the best people to run our business and serve our customers. Our Selecting the One principles focus on finding people whose abilities and experience, temperament, and character are well matched to our company culture.

We regularly invite our employees to build their leadership skills through retreats and roundtables. With a nuanced and holistic understanding of leadership, regular reflection, and a commitment to personal growth, we work together to become better leaders for our company, as well as for our families and our communities.

### OUR GOALS

- Demonstrate improvement in our annual corporate culture survey.
- By 2015, train 100% of our managers to apply Selecting the One principles in their hiring decisions.
- By 2016, 80% of managers and supervisors will have completed leadership training.

# Health and Safety

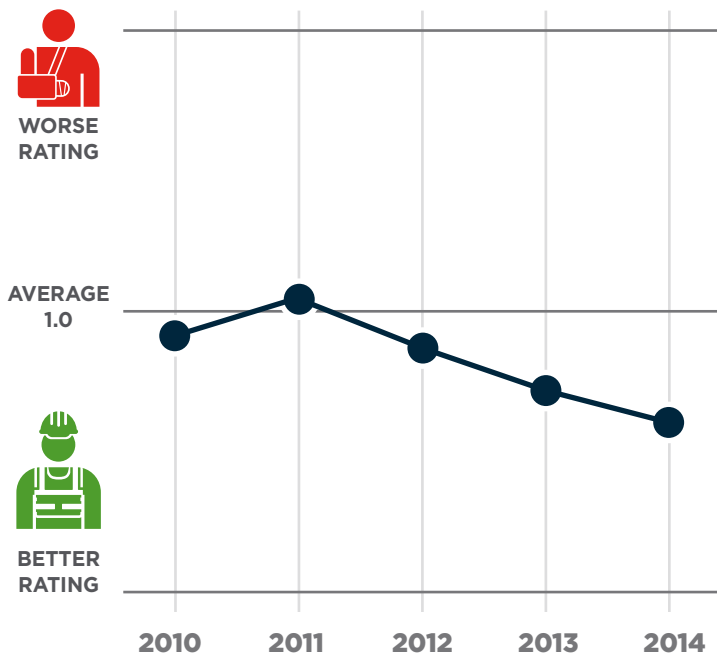
## A Commitment to Our People

Our commitment to our people begins with our dedication to health and safety. Casella drivers spent hundreds of thousands of hours on the road last year and our recycling and disposal equipment includes millions of moving parts. Protecting worker safety in this industry therefore requires the highest levels of commitment and professionalism, and we are proud of our programs and overall performance. In fact, three of our divisions achieved the impressive accomplishment of being 100% accident and injury free during calendar year 2013.



### Safety Performance

(As measured by the Workers' Compensation Modifier Rate)



## Safety

The best evidence of our successful safety efforts can be seen in the Workers' Compensation Modifier Rate. This rate is used by the insurance industry to calculate the cost of workers' compensation coverage. It provides for the adjustment of a policyholder's annual premiums based on previous loss experience relative to others in the same industry. A rating of 1.0 is given to a company that is an average performer. Better than average performers will be assigned a rating of less than 1.0. Below average performers are greater than 1.0. Our goal is to continue to be an above average performer and improve our performance each year. The chart to the left shows our success in achieving this goal.



## Health

In addition to our safety programs, we are pleased to provide for the health of our workers and their families through our health benefits package, which offers a mix of comprehensive high quality plan options. The program emphasizes preventive care and rewards employees for getting annual physical examinations. Several of our divisions further promote wellness by offering healthy snack options and participation in active community events such as 5k walks/runs and bicycle races.

# Community Engagement

Our resource solutions are motivated and shaped by the communities we serve. We build better solutions when we're embedded in the local community. All of our local teams volunteer their time, donate their services, and make monetary contributions to their local communities. Last year we made \$217,000 in charitable contributions and donated countless hours to support local community groups and initiatives.

We also directly contribute to the communities that host our facilities. For example, in New York and Massachusetts, we operate four municipal landfills under long-term operating contracts, each of which is structured as mutually-beneficial public private

partnership. In exchange for the opportunity to operate their disposal facilities, the communities receive a secure long-term plan for their waste as well as robust host community fees that alleviate local property taxes for homeowners and businesses.

Our employees are leaders in the communities where they live, serving on boards, participating in community events, and volunteering with local organizations. We also host open houses at our facilities, inviting our neighbors and other stakeholders to see the high standards at which we operate our facilities, and to raise awareness about solid waste generation and management.

## Goodwill of Northern New England Partnership

### *Reduce, Reuse, Recycle*

Much of the municipal solid waste stream consists of reusable items such as furniture, household goods, electronics, and textiles. To help our customers and communities capture more of these materials for reuse, we are proud to partner with the leaders at Goodwill Industries of Northern New England.

Goodwill NNE has been at the forefront of building a sustainable model for creating value out of society's discarded materials. In their expert hands, unwanted clothes and furniture are transformed into valuable resources: quality jobs, affordable goods, and environmental benefits.

Their GoodTech program is a great example. Under this program, Goodwill NNE refurbishes unwanted electronics, keeping these materials out of the disposal stream, providing valuable job training to their people, and making affordable electronics available to their customers.

At Casella, we appreciate Goodwill NNE's unique skill set and business model, and believe they play an essential role in building our region's resource renewal economy. To support their important work, we draw upon our own expertise and resources: providing solid waste and recycling services to their facilities, helping to market the recyclable materials they produce, and – most recently – helping them to collect more material by placing textile collection containers at our public drop-off locations.



### *More than just stuff*

Goodwill NNE's vision goes beyond just capturing more stuff. It is our shared belief that recovered resources (an old shirt, a recycled bottle, an apple core) can be leveraged to create jobs and empower people.

In late 2014, Casella and Goodwill NNE began exploring ways to leverage Goodwill expertise in employment training and social services in Maine. We hope to advance similar community goals throughout Vermont. To this end, Casella has recently introduced Goodwill to Rutland's Project Vision initiative focused on strengthening neighborhoods in the region through more holistic policing, drug treatment, employment training, and development programs.

We look forward to deepening this relationship, and uncovering more opportunities to partner around successful resource renewal in the northeast.

*“Our strategic partnership with Casella aids us tremendously in achieving our goals for resource renewal.”*

– Michael Howe,  
Goodwill Industries of Northern New England,  
Director, After-Market Businesses



# Building Partnerships

Our partners inspire and challenge us to become a better, more sustainable company.

**Customers:** Our customers motivate us to create stronger solutions and strategies for their homes and businesses. We work to build relationships with these customers, so we can better understand their needs and co-invent the solutions that will help them achieve their goals. These proactive collaborations produce the types of new innovations that will become standard service offerings in the future. Several of their stories are highlighted in the case studies in the following pages.



**Peer Groups:** Through our membership in organizations such as Vermont Businesses for Social Responsibility (VBSR) and New Hampshire Businesses for Social Responsibility (NHBSR), we connect with other New England businesses who share our commitment to creating value for our environment and our communities. These groups give us an opportunity to be inspired by each other's successes, learn from each other's challenges, and motivate each other to keep building the positive impacts of our businesses. A full list of our organizational partners is provided in the appendices.

**Research Partners:** We have the pleasure of servicing many of the leading colleges and universities in the northeast. These relationships often grow into exciting research collaborations, which bring together business and academia to solve pressing real-world issues. For example, this fall, researchers from the University of Maine Orono began an important pollinator habitat study at our Pine Tree Landfill in Hampden, Maine. Last year, students from the Dartmouth College Tuck School of Business conducted market research for our closed-loop recycling services. This summer, students from the University of Vermont Sustainable Entrepreneurship MBA program will analyze our rapidly-growing industrial solutions and food waste businesses. We are thrilled to engage in this way with our partners in academia, and to connect the next generation of talented problem solvers with mentorship opportunities in the resource renewal industry.



# OUR RESOURCE SOLUTIONS IN ACTION

THE CASE STUDIES BELOW ILLUSTRATE SUCCESSES OUR CUSTOMERS HAVE IMPLEMENTED TO CAPTURE VALUE FROM THE WASTE STREAM.

## Tompkins County – Residential Food Scraps Recycling



With a strong commitment to achieving 75% waste reduction by 2016, Tompkins County in upstate New York is always on the cutting edge of municipal recycling. Most recently, the County has set their sights on residential food scraps recycling, making great strides in the past two years. Through a grant-funded pilot that began in 2012, the County is offering free curbside food scraps collection for roughly 1,200 households. Participants received 13-gallon carts, kitchen caddies, compostable liners, and educational materials, and are encouraged to set out their food scraps for weekly collection and delivery to Cayuga Compost in Trumansburg. Casella is proud to provide the collection service for this important trial. County residents can also recycle their food scraps by bringing them to one of five available drop spot locations, or by drawing upon County and Cornell Cooperative Extension support for backyard composting.

## Becton Dickinson (BD)

Becton Dickinson is a global medical technology company that manufactures and sells medical and diagnostic equipment. With Casella's support, the company has developed a successful resource management program, including on-site staff, unified invoicing, monthly performance reports, accessible data dashboards, and ongoing associate education. Under the program, BD is recycling 7,000 tons/year of plastic, 5,000 tons per year of fiber, and 2,000 tons per year of metal and glass. Excitingly, Casella and BD are currently developing a closed-loop recycling program that would beneficially reuse 2,500 tons per year of production waste polypropylene.



## The Lewiston-Auburn Pollution Control Authority



The solid residuals produced at wastewater treatment facilities contain carbon and nutrients that can help to build soils. Still a large percentage of this material is typically disposed in landfills or incinerators. The Lewiston-Auburn Pollution Control Authority in Maine is committed to recycling 100% of their biosolids. To do this, they operate their own compost facility and work with us to complete direct land application of their Class B biosolids in season. Our talented project managers work tirelessly to find suitable fields and coordinate scheduling as dictated by field owner's needs, plant production, and the always unpredictable northeastern weather.

## Skidmore College



Skidmore College had established a goal to achieve 40% recycling by the end of 2014. However, it faced challenges with staff training, communication, data access and signage, and actual recycling performance hovered around 16%. Casella spent time understanding the college's needs, efficiently implemented Zero-Sort Recycling, and began providing monthly data reports. We increased sustainability awareness through co-branded signage, presentations for faculty and staff, and regular waste audits with students and faculty. This increased the recycling rate to 28%, with peak monthly rates of 40% in May and June 2014. The school is also now able to capture and divert increased volumes during move-out periods.

*“From the quarterly meetings and conference calls to the overall support we’ve received, even including our local Casella sales rep sorting trash with us, it has been a very pleasant process. It goes above and beyond what we would expect from a typical waste hauler.”*

– Rachel Willis, Sustainability Coordinator

## Bertucci’s Italian Restaurants

Bertucci’s Italian Restaurant chain has over 90 locations and is renowned for its large open kitchens with distinctive brick oven pizzas. The organization needed a reliable waste management partner to help managers and staff to minimize time spent on waste and recycling. Casella coordinated the delivery of nearly 170 solid waste and recycling containers, and implemented Zero-Sort Recycling at the majority of locations, simplifying the recycling process and diverting more material from the waste stream. By also optimizing collection frequencies and right-sizing containers, we were able to help reduce Bertucci’s solid waste costs and increase recycling.



## Champlain Valley Physicians Hospital (CVPH)



CVPH Medical Center is a not-for-profit hospital with over 2,000 employees, and is one of the largest generators of waste in the Plattsburgh, NY region. Patients at the center need to focus their full energy on getting healthy, and understandably lack time or interest to understand complicated waste sorting rules. Casella helped CVPH implement Zero-Sort Recycling in patient rooms, and created a centralized system to help employees understand the ease of the program for increasing recycling. CVPH has also partnered with Casella to launch a composting program. As a result, 850,000 pounds is being diverted from disposal, and the program helps to reduce costs.

*“It is very important for us at CVPH to be a part of the Zero-Sort Recycling program because we are one of the largest employers in the North Country. We’re putting recyclable, reusable products back out there to be reused and we’re keeping them out of our local landfills.”*

– James Moran, Environmental Services Supervisor

# SCORECARD

RESOURCE RENEWAL	
Tons Recycled and Disposed	Detailed Description
Material Recycled	Recycling tons received, processed, & 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 & carbon value
<b>TOTAL TONS RECYCLED</b>	
Municipal Solid Waste Disposal	Includes waste from residential, commercial, or institutional generators. Institutions include schools & hospitals
Industrial & Construction Waste Disposal	Includes materials such as ash, sludge, construction & demolition debris, contaminated soils, & 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
<b>TOTAL TONS DISPOSED</b>	
Disposal in Facilities with Energy Recovery	Tons disposed of in landfills with energy recovery, as a % of all tons recycled & disposed
MSW Recycling/Diversion Rate	Material recycled, divided by the sum of material recycled and MSW disposed
<b>OVERALL RECYCLING/DIVERSION RATE</b>	Total tons recycled (material recycled plus organic material recycled), divided by the sum of all tons recycled & disposed
Energy Produced and Sold	Detailed Description
Energy Produced from Waste Combustion	Megawatt hours produced and sold at Casella owned/operated Waste Combustion facilities (Maine Energy, closed 2012)
Energy Produced from Landfill Gas and Biogas	Megawatt hours produced and sold at Casella owned/operated landfill and digester power plants
<b>TOTAL ENERGY PRODUCED BY CASELLA (MWH)</b>	
Total Energy Produced by Partners (MWH)	Megawatt hours produced and sold at all Casella facilities, including the power plants at Ontario and Coventry, which are owned/operated by Casella partners
<b>TOTAL ENERGY PRODUCED BY CASELLA AND PARTNERS (MWH)</b>	



2005 Baseline	2010	2011	2012	2013	TARGET
468,423	580,655	554,647	535,355	567,841	
215,679	310,934	309,352	379,831	411,446	
684,102	891,589	863,999	915,186	979,287	1 Million tons/year recycled
1,633,161	1,776,096	1,835,527	1,821,607	1,834,220	
1,271,429	1,464,007	1,412,220	1,216,799	1,256,016	
930,516	1,701,517	1,845,420	1,908,163	2,029,382	
1,750,237	1,546,222	1,477,000	933,945	1,060,854	
209,156	200,778	208,339	196,298	-	
2,889,909	3,448,517	3,530,759	3,038,406	3,090,236	
51%	68%	71%	76%	74%	100% municipal waste to LF with energy recovery
22%	25%	23%	23%	24%	
19%	21%	20%	23%	24%	
159,913	121,591	123,613	113,502	-	
-	98,651	115,778	101,950	99,150	
159,913	220,242	239,391	215,452	99,150	
				129,888	
				229,038	

CONTINUES...

# SCORECARD CONTINUED...

## ENERGY & ENVIRONMENT

### Greenhouse Gas Emissions

### Detailed Description

Landfill GHG Emissions (metric tons CO<sub>2</sub>e)

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

Facility and Fleet GHG Emissions (mtCO<sub>2</sub>e)

Total GHG emissions calculated using EPA Climate Leaders Protocol; includes direct emissions from on-site & fleet fuel combustion & 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 CO<sub>2</sub>e)

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 CO<sub>2</sub>e)

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 of diesel consumed by vehicle fleet

### Other Environmental Indicators

### Detailed Description

Environmental Compliance Enforcement Actions

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. This figure is not normalized by vehicle count or road hours. It includes incidents ranging from mailbox damage to highway accidents. Regardless of severity, we respond to every incident with the highest level of attention.

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

Workers' Compensation Modifier Rate

This rate is used by insurers to calculate the cost of workers' compensation coverage. It is based on our historical safety performance relative to others in our industry. A rating of 1.0 is given to a company that is an average performer. <1.0 indicates above-average performance and >1.0 indicates below-average performance.

## OUR CUSTOMERS & COMMUNITIES

### Community Engagements

### Detailed Description

Charitable Contributions

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

Employee United Way Donations

Cash value of employee donations

2005 Baseline	2010	2011	2012	2013	TARGET
	557,757	498,627	442,798	387,913	
	198,668	205,262	197,694	74,019	
	756,424	703,888	640,492	461,932	Reduce 5% - Achieved
	174	171	162	114	Continuous improvement
	1,640,000	1,570,000	1,510,000	1,600,000	
	73,000	79,000	71,000	33,000	
42,955	17,877	17,894	18,546	19,298	Reduce 5%
141,305	581,437	652,897	876,149	177,467	Reduce 5% - Achieved
5,760,043	5,701,828	5,632,649	5,754,492	5,860,331	Reduce 10%
0.05	0.09	0.04	0.05	0.05	Continuous improvement
n/a	81	79	97	85	Reduce 25%

2005 Baseline	2010	2011	2012	2013	TARGET
70%	85%	87%	76%	79%	Target 86%
n/a	43%	57%	52%	59%	Target 45% - Achieved
n/a	5%	8%	8%	7%	Target 10%
258	266	231	188	288*	Continuous improvement
321	173	156	141	158	Continuous improvement
1.67	1.76	1.70	1.69	1.46	Continuous improvement
0.86	0.97	1.03	0.88	0.86	Continuous improvement

• The year-over-year increase can be explained in part by the following factors: newly acquired operations that required time to achieve Casella's high safety performance, and more comprehensive recording of incidents by Safety staff.

2005 Baseline	2010	2011	2012	2013	TARGET
450,924	303,267	303,446	192,595	217,124	Target \$250,000 per year
14,283	10,500	11,000	9,758	9,000	Target \$15,000

# GRI G4 CONTENT INDEX

This report is prepared partially in accordance with the GRI G4 'Core' guidelines. We are phasing in the implementation of GRI G4. Further implementation of the G4 guidelines, including a full stakeholder engagement program, materiality assessment and value chain discussion will be included in future reports.

## GENERAL STANDARD DISCLOSURES

### Strategy and Analysis

**G4-1** Statement from the CEO. p. 4

**G4-2** Description of key impacts, risks, and opportunities.

*Introduction – Solutions Wanted, p. 2, Our Journey & Approach, p. 7, Scorecard, pp. 40-42, Case Studies, pp. 38-39*

### Organizational Profile

**G4-3** Name of the organization. p. 5

**G4-4** Primary brands, products, and/or services.

*Introduction – Solutions Wanted, p. 2;*

As of May 31, 2014, we owned and/or operated 35 solid waste collection operations, 42 transfer stations, 16 recycling facilities, nine Subtitle D landfills, four landfill gas-to-energy facilities and one landfill permitted to accept construction and demolition ("C&D") materials. Our primary brands include Zero-Sort Recycling, Casella Organics™, earthlife®, and Power of Three™.

**G4-5** Location of organization's headquarters. p. 5

**G4-6** Number of countries where the organization operates and names of countries with either major operations or that are specifically relevant to the sustainability issues covered in the report. pp. 26-27

**G4-7** Nature of ownership and legal form. Corporation.

**G4-8** Markets served (including geographic breakdown, sectors served, and types of customers/beneficiaries).

*Bringing it all together – Customer Resource Solutions, pp. 24-25*

**G4-9** Report the scale of the organization. Total revenues for FY 2014 were \$497.6 million. Total market capitalization was \$204.36 million. Total tonnage processed for calendar year 2013 was approximately 4.07 million tons.

*Bringing it all together – Customer Resource Solutions, pp. 24-25*

**G4-11** Percentage of employees covered by collective bargaining agreements.

Approximately 3.8%

**G4-13** Report any significant changes during the reporting period regarding the organization's size, structure, ownership, or its supply chain. Since 2012, we have (a) divested of Maine Energy Recovery Company, LP ("Maine Energy"), a low margin, negative cash flow waste-to-energy operation, in December 2012; (b) divested of KTI BioFuels, Inc. ("BioFuels"), a low margin, negative cash flow C&D processing facility, in July 2013; and (c) sold our 50% equity interest in GreenFiber, a negative cash flow cellulose insulation joint-venture, in December 2013, and (d) are in the process of winding down the operations of our CARES water treatment facility in PA. We purchased the remaining 50% interest in Tompkins County Recycling LLC, formerly a 50% joint venture we held with Tompkins County, NY, and invested in BGreen Energy, LLC, to build an additional anaerobic digester in MA.

### Commitment to External Initiatives

**G4-16** List memberships of associations (such as industry associations) and national or international advocacy organizations. *Appendix C*

### Identified Material Aspects and Boundaries

**G4-17** List all entities included in the organization's consolidated financial statements or equivalent documents. Report whether any entity included in the organization's consolidated financial statements or equivalent documents is not covered by the report.

We hold a 51% membership interest in Casella-Altela Regional Environmental Services, LLC, a joint venture that develops, owns and operates water treatment projects for the natural gas drilling industry in PA and NY and can also be used to treat leachate at our landfills (it should be noted, however, that we are winding down the CARES operations currently, a 19.9% ownership interest in Evergreen National Indemnity Company, a surety company that provides surety bonds. We have also invested in and partnered with AGreen Energy, LLC and BGreen Energy, LLC, innovative firms that are building small anaerobic digesters in the Northeast to generate electricity from farm and food waste streams. We also hold a preferred stock ownership interest in GreenerU, Inc. ("GreenerU"), a company that delivers energy and sustainability solutions to the college, university and preparatory school markets. However, we apply the Operational Control standard for establishing our reporting boundary, and therefore this report only covers Casella Waste Systems and not our joint ventures or partners.

**G4-18** Explain the process for defining the report content and the Aspect Boundaries. *Appendix A*

**G4-22** Report the effect of any restatements of information provided in previous reports, and the reasons for such restatements.

Our scorecard on pp. 38-39 includes data that have been restated to reflect the divestitures and acquisitions described in G4-17 of this Content Index.

**G4-23** Report significant changes from previous reporting periods in the Scope and Aspect Boundaries. None.

## Stakeholder Engagement

**G4-24** List of stakeholder groups engaged by the organization. *Appendix E*

**G4-25** Basis for identification and selection of stakeholders with whom to engage. *Appendix E*

**G4-26** Report the organization's approach to stakeholder engagement, including frequency of engagement by type and by stakeholder group, and an indication of whether any of the engagement was undertaken specifically as part of the report preparation process. *Appendix E*

## Report Profile

**G4-28** Reporting period (e.g., fiscal/calendar year) for information provided. Calendar Year 2013 for all sustainability metrics and data. Fiscal data is reported for FY 2014, covering the period May 1, 2013 – April 30, 2014.

**G4-29** Date of most recent previous report (if any). Calendar Year 2011.

**G4-30** Reporting cycle (annual, biennial, etc.). Biennial.

**G4-31** Contact point for questions regarding the report or its contents. p. 5

## GRI Content Index

**G4-32** Report the 'in accordance' option the organization has chosen. This report contains Standard Disclosures from the GRI Sustainability Reporting Guidelines (G4). It is not prepared fully in accordance with the 'Core' standard, however.

**G4-33** Report the organization's policy and current practice with regard to seeking external assurance for the report. This report is not externally assured.

## Governance Structure and Composition

**G4-34** Report the governance structure of the organization, including committees of the highest governance body. Identify any committees responsible for decision-making on economic, environmental and social impacts. *Appendix D*

## Ethics

**G4-56** Describe the organization's values, principles, standards and norms of behavior such as codes of conduct and codes of ethics.

Casella maintains a Mission, Vision, and Core Values statement, available on our website. Casella maintains a Code of Business Conduct and Ethics, available on our website. Casella's Environmental Policy can be found in Appendix B.

## SPECIFIC STANDARD DISCLOSURES (INCLUDED ONLY THOSE THAT ARE MATERIAL)

### Economic Performance

**G4-EC2** Financial implications and other risks and opportunities for the organization's activities due to climate change

A discussion of the financial implications of environmental regulations related to GHG emissions and air pollution can be found on page 16 of our 2014 Annual Report.

**G4-EC4** Financial assistance received from government. We have been awarded a Pennsylvania Department of Transportation (PADOT) grant to build a rail siding at the McKean County Landfill. As of the writing of this report, the funds have not yet been received from PADOT.

### Environmental

#### Energy

**G4-EN3** Energy consumption within the organization. *Scorecard, pp. 40-42*

**G4-EN6** Reduction of energy consumption. *Scorecard, pp. 40-42, Our operations: Walking the Walk in our fleet and facilities, p. 26*

#### Emissions

**G4-EN15** Direct greenhouse gas (GHG) emissions (Scope 1). *Scorecard, pp. 40-42, Our operations: Walking the Walk in our fleet and facilities, p. 26*

**G4-EN16** Energy indirect greenhouse gas (GHG) emissions (Scope 2). *Scorecard, pp. 38-39, Our operations: Walking the Walk in our fleet and facilities, pp. 22-23*

**G4-EN18** Greenhouse gas (GHG) emissions intensity. *Scorecard, pp. 40-42, Our operations: Walking the Walk in our fleet and facilities, p. 26*

**G4-EN19** Reduction of greenhouse gas (GHG) emissions. *Scorecard, pp. 40-42, Our operations: Walking the Walk in our fleet and facilities, p. 26*

#### Effluents and Waste

**G4-EN23** Total weight of waste by type and disposal method. *Scorecard, pp. 40-42,*

**G4-EN24** Total number and volume of significant spills. *Scorecard, pp. 40-42*

### Social

#### Employment

**G4-LA1** Total number and rates of new employee hires and employee turnover by age group, gender and region (partial). *Scorecard (Employee Retention), pp. 40-42*

#### Labor/Management Relations

**G4-LA6** Type of injury and rates of injury, occupational diseases, lost days, and absenteeism, and total number of work-related fatalities, by region and by gender (partial). *Scorecard, pp. 40-42, Our People - Safety, Leadership, Commitment, and Partnerships, p. 32*

#### Training and Education

**G4-LA10** Programs for skills management and lifelong learning that support the continued employability of employees and assist them in managing career endings. *Our People: Developing High Impact Leaders, p. 34*

# APPENDICES

## Appendix A: Report Development

We prepared this report over the course of 2014, drawing on input from our cross-functional Sustainability Leadership Team as well as other department heads. Our sustainability leadership team convenes quarterly and includes representatives from Operations, Sustainability and Regulatory Affairs, Marketing, Sales, and Communications.

In this, our third full Sustainability Report, we have elected to remain focused on the same key stakeholders, within the same scope and boundaries, and focusing on the same relevant performance indicators as in our initial disclosure. Performance indicator data were compiled and provided by the Sustainability Team members. Casella's Vice President of Sustainability and Regulatory Affairs leads our quarterly sustainability meetings and the annual report development process.

We value the input we receive from our key internal stakeholders during the reporting process, and we are actively working on expanding our reach to solicit input from a broader range of stakeholders in our report development process. Our plan for implementing a more robust and comprehensive stakeholder engagement process is explained further in Appendix B.

We issue our reports biennially, as part of a comprehensive sustainability review process guided in part by the Ceres Roadmap for Sustainability. In off years, we release our performance indicator scorecard and issue a brief interim update. As noted above, this process is implemented by our Sustainability Team.

## Appendix B: Stakeholder Engagement

As we begin our gradual implementation of the GRI G4 reporting framework, we are using the opportunity to more actively engage with both internal and external key stakeholders on important sustainability topics. Our current stakeholder groups and engagement activities are summarized below.

Over the next 2 years, we plan to expand this list of key stakeholders and implement additional outreach and engagement activities. We look forward to sharing our sustainability journey with our diverse stakeholder groups, and continuously improving our performance with their valued insight and feedback.

Stakeholder Group	How We Engage
Customers	Customer Care Center, phone surveys, web surveys
Employees	Safety and environmental training sessions, leadership training, annual performance reviews, "Share an Idea" button on our intranet employee portal.
Communities	Public meetings, open houses and facility tours at our recycling centers and landfills
Investors/Shareholders	Investor calls

## Appendix C: Environmental Policy

### Casella Environmental Policy

We are deeply committed to protecting and improving the environment for our people and the communities we serve. We conduct our business and operate our facilities with consideration for their environmental impact. Our responsibility for the environment spans from the construction, maintenance, and operation of our facilities to the maintenance and operations of our vehicles and the conservation of resources. As a leader in the field of resource renewal we continually evaluate new technology and seek opportunities to improve environmental performance. All of our employees are responsible for protecting and improving the environment, from attaining a basic level of regulatory compliance to identifying opportunities for continued improvement and environmental excellence. Adhering to this environmental policy simultaneously benefits the environment and our business. Our environmental focus ensures we maintain compliance with applicable laws and regulations. Viewing our business through an environmental lens helps us identify new opportunities for growth. It helps us manage risk. Pursuing our environmental policy allows us to create competitive advantage and exceed as a company. To assist in the management of our environmental responsibilities we have developed five key Environmental Leadership Statements that serve as over arching guidelines from which we establish actionable performance goals.

### Environmental Compliance

We conduct our environmental compliance program in accordance with Casella's Code of Business Conduct and Ethics to ensure compliance with applicable laws, regulations, and company requirements. We implement a robust and thorough facility inspection program and correct identified deficiencies promptly.

### Air & Climate Protection

We protect our air resources and the global climate by measuring and reducing our air emissions. We measure, calculate, and report the emissions from all of our operations, facilities, vehicles, and equipment. Implementing our low emission landfill standards and operational techniques helps us minimize landfill gas emissions using newly emerging and cost effective technologies. Energy efficiency measures allow us to reduce combustion emissions from our fleet and facilities, as does the use of alternative fuels in our vehicles.

### Water Protection

We protect water resources through the responsible handling of petroleum products and the minimization of leachate generation. Landfill operating procedures and on-site treatment programs allow us to minimize leachate generation at the source. We avoid petroleum releases through rigorous programs of inspections and preventive maintenance for our fleet vehicles, operating equipment, and storage tanks. Extensive training and best management practices ensure we are prepared to promptly respond to any release, assess the environmental impact, and take appropriate corrective action.

### Land Protection

We broadly define our land resources as encompassing the habitat and ecosystems impacted by our operations. We minimize our impact on the land through the intelligent application of landfill liner systems, leachate and gas collection infrastructure, and emission control and treatment systems. We minimize our consumption of resources through the beneficial use of materials such as tire chips, glass cullet, and contaminated soils—rather than virgin mineral materials—in constructing and operating our landfills. Where possible, we work to improve the land through habitat restoration and waste relocation projects.

### Community Engagement

Our business provides a necessary and valuable service: managing society's discards in a safe and environmentally responsible manner. We raise awareness about the importance of recycling and resource renewal by supporting outreach and education efforts in the communities we serve. We regularly give presentations to school and community groups, offer educational tours of our facilities, and fund community scholarship programs. We make these investments because we are committed to developing strong trusting relationships and building an enduring ethic of environmental stewardship within our communities.

## Resource Conservation and Renewal

We are committed to the principles of “reduce, reuse, and recycle” at each of our locations. All Casella locations offer recycling options for cardboard, paper, plastic, and metals. In purchasing, we observe a preference for recycled and recyclable products. We responsibly dispose of all remaining waste from our business and operations.

## Appendix D: Corporate Governance

The day-to-day business at Casella is carried out by our employees under the direction and leadership of our Chairman and Chief Executive Officer John W. Casella. Led by lead director Gregory Peters and the Casella board of directors:

- Reviews the company’s performance, strategies, and major decisions
- Provides oversight of the company’s compliance with legal and regulatory requirements, enterprise risk management, and the integrity of our financial statements
- Provides management oversight including review of the chief executive officer’s performance and succession planning for key management roles
- Provides oversight relating to compensation for the chief executive officer, key executives, and the board, as well as oversight of compensation policies and programs for all employees

### Board Committees

Our board has three standing committees—audit, compensation, and nominations & governance— each of which operates under a board-approved charter. The compensation committee has a stock plan subcommittee. Our board has determined that all of the committee and subcommittee members are independent as defined under the rules of the NASDAQ stock market. Our corporate governance guidelines, committee charters, code of ethical business conduct, and other governance materials are available on the investor relations page of the Casella corporate website.

### Board Leadership Structure

The Chairman of the Board of Directors, John W. Casella, is also chief executive officer. We believe that our chief executive officer is best situated to serve as chairman of our board because he is the director most familiar with our business and industry and is therefore best positioned, collectively with the lead director, to establish the board’s agenda and fulfill the other responsibilities of the chairman of the board. As our chief executive officer since 1993, Mr. John Casella has been an integral part of the leadership of our board and his strategic vision has helped to guide our growth and performance. Our board believes that its leadership structure is appropriate because it strikes an effective balance between strategy development and independent leadership and management oversight in the board process.

### Communicating with the Independent Directors

Our board gives appropriate attention to written communications submitted by stockholders. Our lead outside director, with the assistance of our general counsel, is primarily responsible for monitoring communications from stockholders and for providing copies or summaries to the other directors as he considers appropriate. Communications are forwarded to all directors if they relate to important substantive matters and include suggestions or comments that the lead outside director considers to be important for the directors to know. In general, communications relating to corporate governance and long-term corporate strategy are more likely to be forwarded. Stockholders who wish to send communications to our board may address such communications to:

**Board of Directors,  
c/o Corporate Secretary,  
Casella Waste Systems, Inc.,  
25 Greens Hill Lane,  
Rutland, VT 05701**

Casella maintains a My Safe Work Place incident reporting phone line staffed by an independent third party. Individuals can make anonymous reports to My Safe Work Place through a toll-free number or via the Casella corporate website to report accounting discrepancies, ethics violations, fraud, theft, harassment, and workplace and fleet safety concerns. We encourage good faith reporting of all concerns and prohibit the retaliation for submission of an incident report. My Safe Work Place contact information is included in our employee manual, on the company’s intranet, and on posters displayed at our facilities.

## Appendix E: Memberships & Organizations

Casella is a member of or collaborates with the following organizations (partial list):

### National

National Recycling Coalition  
National Waste & Recycling Association  
Carbon Disclosure Project  
Association of Post-Consumer Plastic Recyclers  
Water Environment Federation  
Solid Waste Association of North America  
US Composting Council  
United Way

### Regional

Northeast Recycling Coalition  
Northeast Resource Recovery Association  
New England Biosolids and Residuals Association  
New England Water Environment Association  
New England Nursery Association, Inc.  
New England Water Environment Association, Inc.  
Northeast Biosolids and Residuals Association  
Eastern Paper Mill & Suppliers, Inc.  
Mid-Atlantic Biosolids Association

### Massachusetts

MassRecycle  
Massachusetts Nursery and Landscape Association

### Vermont

Vermont Council on Rural Development  
Vermont Chamber of Commerce  
Vermont Truck and Bus Association  
Vermont Businesses for Social Responsibility

### Maine

Maine Chamber of Commerce  
Maine Wastewater Control Association  
Maine Rural Water Association  
Maine Landscape and Nursery Association  
Independent Energy Producers of Maine  
Maine Pulp and Paper Association  
Maine Organic Farmers’ Association  
Maine Business for Social Responsibility  
Maine Municipal Association  
Maine Resource Recovery Association

### New Hampshire

New Hampshire Timberland Owners Association  
New Hampshire Businesses for Social Responsibility

### New York

New York State Association for Solid Waste Management  
New York State Solid Waste Federation  
New York State Association for Reduction, Reuse, and Recycling  
Rail Operators of New York Association



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