



**Sandra Kristen**  
Safety Director,  
Health & Safety Department

# Greenlight New Day. New Way.



## Meet DRP

**Employee Highlight: Sandra Kristen**  
Sandra Kristen carries Detroit Renewable Energy's environmental health and safety around with her like a newborn, with genuine affection and a nurturing management style. She has been providing health and safety guidance, training, and procedures to Detroit Thermal for two years; however, she just joined the Detroit Renewable Power (DRP) team in December as the new Health and Safety Program Director with Detroit Renewable Energy (DRE). For more than 14 years, Sandra has had a hands-on role in accident investigation, businesses corporate asset protection, and institute training. "People are our greatest asset at DRE," Sandra stated. "My experience has prepared me to help bring Detroit Renewable from its current place to a pillar of safety integrity."



As an Occupational Safety and Health Association (OSHA) Outreach Trainer, Sandra is the ideal candidate to bring the DRE companies through a revolutionary culture shift to become a world-class safety leader. By taking a coaching and problem-solving role, Sandra is methodically building a program specific to the company's unique needs. She is arming DRP's "safety soldiers" with foundational insight and an environmental redefining of standard procedures that will lead to zero injuries across the company.

Sandra added, "I am proud to say that people have taken an active interest in our success, whether it be signing up for Safety Mentoring or volunteering on the Safety Committee. We are making great strides. DRE employees across the company are championing new programs and protocols that have already decreased **injury rates.**"

As a continuous improvement initiative, Sandra works to integrate goals into everyday processes for the greatest success. Health and safety are

not just internal improvements; Sandra works closely with MIOSHA to align the company with long-range continuous improvement milestones. •



## Inside this Issue

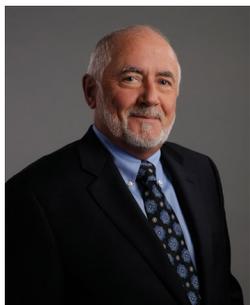
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### Did you know?

The energy-from-waste industry is at the forefront of the sustainability effort in the U.S. simply because it re-resources discarded material. The Penn State Energy-from-Waste Extension Team is researching valuable sources of energy from potential waste streams, such as animal waste, food processing waste, urban wood waste, waste plastic, and municipal wastes for the betterment of its community and state.



## A Note from John O'Sullivan



Welcome back to *Greenlight*, Detroit Renewable Power's (DRP) newsletter dialogue with our employees, business partners, and citizens in Detroit.

As spring approaches, we look back on a cold winter that, while trying for us all, showcased DRP's ability to reliably generate renewable energy that delivered heat, hot water, and electricity to thousands across the region.

Our plant, and Detroit Renewable Energy's district heating and power services affiliates, continue to improve operating efficiencies, safeguard environmental resources, increase worker safety, and build and support community programs.

We also recognize the vital roles DRP and all Detroit companies play in Detroit's economic renaissance as Governor Snyder works to restore and restructure the City's finances through an emergency management process. There is perhaps no greater definition of sustainability, which we discuss elsewhere in this newsletter, than demonstrating the ability

to operate a business that drives economic value, protects public health and natural resources, and provides fair, well-paying jobs. DRP and its sister companies are committed to sustaining our positive contributions to the City throughout these challenging times.

Please enjoy this issue of *Greenlight* and contact us with any questions about our clean renewable energy business. •

Best Regards,



## High Points Milestones.

**This spring, Detroit Renewable Energy (DRE) will release its inaugural Sustainability Report. The report includes an overview of our business, economic activity, people, environmental performance, community engagement, and plans for continuous improvement.**

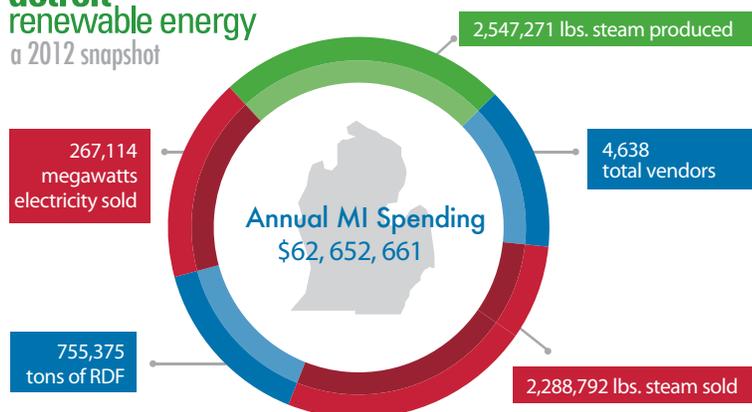
In general, sustainability reports serve many purposes. They tell a company's story, sketching its philosophy on corporate social responsibility and—if done well and backed by data—provide evidence for its position as an existing or emerging environmental leader. These reports hold companies accountable and require transparency. They track a company's progress toward its goals to reduce emissions, increase efficiencies, and improve the employee experience. They speak to investors, board members, industry peers, and community members.

For DRE, this last audience is particularly important. We've always viewed ourselves as an integral part of Detroit's revitalization and, as such, have strived to produce a report in a way that's accessible to Detroit's people—our neighbors and friends. "DRE has weathered a challenging start to a unique enterprise, but we're glad to be in Detroit," said DRE Chairman Steve White. "We look forward to growing as a positive economic, environmental, and civic engine for this great city. We know this will happen only if DRE—and other major companies in Detroit—commit to building and maintaining corporate cultures that fully embrace sustainable business practices."

Sustainability does not exist in a vacuum—it requires a company and its partners, customers, employees, and neighbors to hold the same values and strive for the same goals. Our principal sustainability goal is to demonstrate a commitment to operate our companies in ways that respect and safeguard people, support neighborhoods, stimulate economic growth and cooperation, and protect and renew natural resources.

"Achieving full sustainability may be impossible. Living its principles every day is not," Steve said. DRE's Sustainability Report will be available for public consumption when released this April. •

### detroit renewable energy a 2012 snapshot





## FAQ The Tip Floor.

Addressing the issues that matter most to our community is a priority at DRP and we strive to provide in-depth, well-educated responses to the inquiries we receive. In this section, we highlight some of the most frequently asked questions posted to our website. To submit a question to Detroit Renewable Power, please visit our website at [www.detroitrenewablepower.com](http://www.detroitrenewablepower.com).

### Q What trash does DRP accept?

**A** Detroit Renewable Power generates energy from municipal solid waste, defined by U.S. Environmental Protection Agency guidelines as household, commercial/retail, and/or institutional waste. This does not include oils; sewage sludge; wood pallets; construction, renovation, and demolition wastes; industrial process or manufacturing wastes; medical waste; or motor vehicle parts or vehicle “fluff.” Aggressive recycling technology processes up to 3,300 tons per

day of the acceptable municipal solid waste through a series of conveyors, shredders, and magnets that prepare the trash for combustion. Here in Detroit, we received 788,798 tons of MSW, which is enough energy to power more than 267,000 homes for a year, based upon Berkeley National Laboratory figures.

### Q What is DRP doing about odor complaints?

**A** Reports of odor around the plant have been a long standing conversation preceding

DRP ownership, going back to about 1990. Although there are a number of other odor generating industries nearby, DRP takes every odor complaint seriously. In 2012, DRP invested more than \$88,000 for a national independent consultant to conduct a detailed mapping of odor complaints. In 2013, DRP will be conducting additional measures to reduce the generation of odors. Detroit Renewable is continuously exploring innovative improvements as a responsible community member.



## Energy from Waste

### In-Depth

Recycling and energy-from-waste have long been proven to have a complementary relationship, leading to mutually beneficial results for the environment. Research has proven that communities with an energy-from-waste facility recycle more (5 percent) than the national average, based upon *MSW Management* magazine. More than 250 million tons of waste are sent to landfills each year in the U.S. Even with an aggressive recycling and composting plan, there would still be residual waste to power energy-from-waste facilities 24/7. Using this waste to create renewable energy lessens (reduces) the release of harmful greenhouse gas emissions that are substantially more prevalent in landfilling waste. Communities that have active recycling programs also help energy-from-waste facilities by sorting and repurposing more materials for a more efficient plant process. The removal of metals, glass, paper products, yard waste, and household hazardous materials, such as batteries, cell phones, and computer components, complements the energy-from-waste process.

### Up-Close

Last year, the DRP energy-from-waste process recovered and recycled 26,694 tons of metal from the waste stream, enough to cover more than two football fields and making it the largest single recycler of ferrous and non-ferrous metals in Wayne County. Moving forward, Detroit Renewable Energy’s goal is to work with the City of Detroit to develop a comprehensive waste management program that includes recycling and is paired to a DRP energy recovery plan.

### Plastic

Recycling plastic requires only 10 percent of the energy needed to create new plastic from raw materials.

### Aluminum

Recycling an aluminum can requires less than 5 percent of the energy that would be expended in creating a similar can out of fresh bauxite ore.



Statistics from U.S. EPA

## Terms Defined

highlighted in this issue of the *Greenlight*:

**Sustainable** n. – economic, social, and ecological concepts to support, maintain, or endure in the present and in the future.

**Emissions** n. – a substance discharged into the air, especially by an internal combustion processes such as occurs at our facilities’ boilers.

**Rate of Injury** n. – the total number of non-fatal work-related injury and illness cases involving days away from work.

### Glass

Recycling glass requires only 30 percent of the energy costs required to produce new glass.

### Paper

Recycling paper products requires only 60 percent of the energy required to create a new paper product from fresh wood pulp, and recycling a ton of paper can save 17 trees, which reduces the amount of carbon dioxide present in the atmosphere. Recycling paper also requires about half the water normally used in processing paper from virgin wood.

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## Community Connections

**Starting in April, Detroit Renewable Energy (DRE) will be fostering sixth grade science students at Golightly Education Center in an ecosystem project to focus on the interconnected nature of food cycles, microbes, and soil.**

Spearheaded by Detroit Renewable Power's (DRP) Director of Environmental Affairs Alan Greenberg, employees from across the consortium will be invited to participate in this student enrichment program. "It is important that we share the wealth of experience at DRE with local young people, and there is no more impactful way to do that than through experiential learning," DRP President John O'Sullivan said.

Ninety sixth-grade science students will participate in soil studies; site design and layout; plant research, selection, and cultivation; field trips; and building four large raised beds to apply their learning. The Education to Life program will culminate in the three sixth grade classes presenting individual

project reports in competition for a classroom mini-grant and classroom field trip to the Detroit Science Center. Golightly Sixth Grade Science Teacher Ms. Vincent added, "We are very excited to partner with DRE and present these students with greater learning opportunities."



## Safety Spotlight

**How the public can help impact the safety of the DRP employees:**

When we discard unwanted items we lose track of where those items go. Some find ways into the landfill, some are recycled, and some find their way onto the DRP Tipping Room floor where the waste is bulk sorted and processed.

If hazardous materials such as chemicals, medical waste, compressed gases, and other dangerous items are brought in the waste stream of our facility, we have an unnecessary risk to control. Please consider employees and help our efforts by properly disposing of hazardous wastes.