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# Introduction

Prairie State Group (PSG) set out years ago to do its part to become more environmentally responsible. By educating and encouraging participation from its employees, PSG has greatly reduced its environmental footprint, all while continuing to provide the quality and world class customer service it has become known for.

PSG's accomplishments include various sustainability initiatives, including efforts to reduce the amount of waste sent to the landfill, and the use of energy and natural resources. As you continue to read through, you will see what steps PSG has implemented to be able to achieve these goals.

PSG's ownership is hard at work trying to find ways they can increase production, while staying focused on reducing landfill waste and emissions. Case in point, some of our most recent equipment investments will affect our waste generation for our pressure sensitive label (digital assets) and film lines (new laminator), greatly reducing start up waste. In addition to, our B6030 Vertical Baler allows us the ability to recycle and reuse 40% of our waste!

Moving forward, PSG will continue to do its part to help the environment, and will seek to partner up with companies who think alike.

# Sustainability Policy

Prairie State Group's sustainability policy is "adopting strategies and activities that allow a company and its stakeholders to realize their profit goals in ways that protect, sustain, and restore the Earth's life support systems." While Prairie State's commitment to the environment is strong and ever increasing, so is its commitment to the quality of its products and customer satisfaction. Therefore, Prairie State will always work to reduce its carbon footprint by exploring new means of recycling, waste reduction, chemical usage, ink usage, supply sourcing, etc., so long as it does not compromise the ultimate quality of the products Prairie State provides.

Prairie State's commitment is to continue researching and implementing acceptable alternatives to current processes where necessary and feasible, and to always adhere to the guiding principles of the Sustainable Green Printing Partnership. Prairie State commits to achieving and maintains Environmental Health and Safety (EHS) regulatory compliance. Prairie State commits to educating its customers on the values of sustainable printing and will urge customers to consider the environment in the printing choices they make.

And, finally, Prairie State commits to remaining an industry leader in flexographic printing by ensuring our green vision does not interrupt customer satisfaction or product quality, but rather coincides with it so that we may be a model corporation for others seeking effective ways to become sustainable without product sacrifice.



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## Mission Statement

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“Our mission is to offer the highest level of customer satisfaction by efficiently providing industry leading quality, innovation, and cost effective packaging solutions to our clients.”

2016



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## Guiding Principles

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- Safety & Wellness
- Leadership
- Innovation
- Continuous Improvement
- Employee Engagement
- Professional Development
- Sustainability

2016

# Sustainability

Sustainability is morally right, but in business, sustainability has to make business sense, too. For Prairie State Group's (PSG) executives and managers, sustainability is a major goal, when it does not interfere with product or service quality. And being able to quantify how these practices make an impact, both environmentally and monetarily, is important.

Executives and management at PSG made tough decisions in production to reduce waste and cost. Dan Doherty, PSG's executive vice president/principal, has encouraged all of his employees to submit ideas that could make the company more sustainable. "We encourage process improvement through our plant-wide idea program, GIFT – Great Ideas for Today. Recently, a GIFT incentive program resulted in 93 new ideas from our employees; many of these ideas reflected our organization's commitment to sustainability," says Doherty.

## Drum Recycling

PSG's green initiatives continue to flow through the rest of the company. Recognizing that empty solvent drums were being thrown away into the compactor, the company decided to come up with an answer to alleviate that.

"Since partnering with a local drum recycling company, we have recycled 224 drums in 2009 and 384 drums in 2010. This means less waste in our local landfills as well as less use of natural resources to manufacture new drums. We have seen 100 percent improvement in the overall waste reduction program here at PSG as a direct result of this waste not being in our compactor," Doherty says.

## Raw Material Waste Reclamation

"At over 250 five- to eight-color orders a month, we generate plenty of make-ready and waste rolls. Approximately 90 percent of these flexible packaging rolls were being loaded into the compactor. We found and partnered with a company that regrinds waste rolls to be used in other manufacturing processes," explains Doherty.

PSG's quantifiable numbers for landfill waste include 2,068,300 pounds of waste in 2008; 1,361,260 pounds in 2009; and now 1,108,460 pounds in 2010.

Implementation of this initiative has reduced landfill waste by 47 percent since 2008.

“As a result, the frequency with which we have waste hauled away from our facility has diminished, going from 3 pick-ups a week to less than one. Of course, this also saves us [money in] hauling and dumping fees,” Doherty explains. “We saw a savings of nearly \$45,000 in 2010 over what we spent for waste removal in 2008-2009. We would highly recommend this initiative to our colleagues, as it has an easy implementation once a holding area is designated to gather the material to be recycled.”

## **Press Wash Recycling**

PSG sought to lower its press wash solvent waste as well. In 2008, PSG contributed to 136 drums of spent solvent press wash. PSG decided that something needed to change.

“The first step in the reduction was to implement a program that allowed us to reuse the dirty press wash two to three times, reducing our disposal by 103 drums in 2009. The waste stream was reviewed again in June 2010 and we removed contaminants, which allowed us to reduce our number again, this time to 86 drums,” Doherty explains.

“During the last six months of 2010, only 33 drums of solvent press wash waste were generated. We installed a solvent recycling system in-house in December 2010. Currently we send out less than one drum per week and expect to see continued reduction to fewer than 40 drums total in 2011,” says Doherty.

“Using an electronically controlled distillation process, the ECOpure separates contaminants from the used solvent, resulting in a 95 percent recovery rate and a 90 percent reduction of disposal of toxic waste,” comments PPCTS president Richard McDonald, manufacturer of the solvent recycling machine.

These improvements have helped PSG decrease its waste hauling, as well as lower its need to purchase large amounts of press wash solvent. Environmental impacts include saved fuel associated with hauling old solvent and delivering new solvent, the elimination of properly disposing of spent solvent, as well as saving the production of new solvent.

“In addition, we save approximately \$100 per drum that we do not send out. The 2010 reduction saved us close to \$6,000 over the 2008 numbers. We have not purchased any new unused solvent since early December. Additionally, we are using fewer buckets, as we no longer utilize used press wash solvent more than one time. This saves not only money, but also storage cost and floor space,” says Doherty.

PSG’s new press wash solvent recycling program may also put them in better graces with the EPA. “If we continue on this path, we will be applying for Small Quantity Generator status, moving away from our Large Quantity Generator status with the local and federal regulatory bodies. This will decrease our reporting functions as well as show a working minimization program,” Doherty explains.

## **Plate Wash Solvent Recycling**

Doherty and his team also looked into improving the company’s plate wash solvent use. “After just one use, we were replacing solvent with a recycled product and sending out dirty solvent. This created by-weekly out-of-state shipments of dirty solvent as well as the occasional need to purchase new virgin solvent.”

The PSG team determined a way around that problem. “By creating our own recycling solution, we were able to decrease our dirty solvent shipments from 27 drums in 2008 to 16 drums in 2009 and 10 drums in 2010. Less regulated waste being shipped out means a decreased shipping impact, too. Less fuel consumption, truck emissions and road wear are just a few of the overall environmental benefits,” Doherty explains.

## **Energy Consumption Initiatives**

As with many production plants, companies are required to track and record natural gas usage. Doherty explains that the company was able to adjust usage to lower operational costs while being more earth friendly. “We utilize a pollution control device for solvent emission destruction. In compliance testing in 2007, the Illinois EPA approved a high temperature setting for this device that required a large amount of natural gas to achieve. With increased proficiency, we sought to reduce the temperature setting in order to decrease our natural gas usage.”

“In September 2010, we retested and earned the approval for this lower temperature. We are reducing the impact on our environment by decreasing our consumption of natural gas, a resource that is regulated by the Illinois EPA; as a greenhouse gas, further regulations regarding this resource may be pending,” continues Doherty.

“As a result of our decreased consumption, we have seen a 23 percent reduction in our gas bill in the fourth quarter of 2010 versus the same quarter in 2009. The cost per therm is running near \$0.40 and we anticipate a yearly savings of approximately \$12,000. While we had to pay for the retesting of this pollution control device, we expect the return on investment to be around 18 months,” Doherty explains.

PSG has also started recycling all waste paper, plastic and aluminum cans that the office generates at a local recycling center.

Doherty also mentions that the company will be changing out all of the lights throughout the offices, plant and warehouse. “We are going to change out all of the lights – we’ll get a 2 year payback with a \$30,000 investment. All of the lights will be changed out and installed in the plants and offices with automatic turn-on/-off motion sensors to save electricity and environmental impact.”

Being able to quantify your sustainable practices into true return on investment (ROI) numbers might be more attainable than you think. And with tax day upon us that true ROI could be felt much sooner than you might expect.

Prairie State Group’s motto is, “Shorter runs, quicker turnarounds, high-end graphics.” Sustainable practices could easily be added to that motto, too.

## Going Green

One of our major goals is to reduce and eliminate any products going to the landfill by reusing and repurposing.



### Green Initiative

- Partnered with local business to reduce gas consumption and for various recycling projects, including:
  - Press end boards and plastic end plugs
  - Ink barrels
  - Press chemical barrels
  - All corrugated cardboard
  - All film waste
  - All paper products
  - Aluminum
- Additionally we have an in-house recycling system for all solvents used which salvages 96% of all solvents leaving only 4% solid waste to be sent out
- RTO which destroys 97% of all emissions
- Cut landfill waste from 2 MM# to 1 MM# in 12 months



2016

Bramidan US, Inc.  
644 Supreme Dr.  
Bensenville, IL 60106

Bramidan Balers  
August Case Story

## Midwest label printer recycling & reusing 40% of their waste

### ZERO LANDFILL GOAL

For many American companies, substantial waste by-product is generated during production. In an effort to meet environmental and safety standards, many of these companies create a recycling program with a goal of diverting recyclable waste from the landfill, while, at the same time, placing a high priority on lowering the cost of waste disposal pickups. Prairie State Group, located just outside of Chicago, is no exception. One of Prairie State Group's major goals is to reduce and eliminate any products going to the landfill by reusing and repurposing them. To accomplish this, while also working towards achieving a cost neutral goal, they've installed a Bramidan B6030 vertical baler.

### WASTE PICKUPS REDUCED

Prior to purchasing a vertical baler, Prairie State Group was using gaylords to separate their numerous waste types. Most of the material being discarded is waste by-product from the production of custom printed food packaging and labels. Once each waste stream was isolated, it was picked up with a trailer drop. With 26,000 pounds of waste being picked up each month, the label producer was spending more money than they would have liked on waste pickups and tipping fees. However, since installing the 60" baler to compact cardboard, plastic shrink wrap, clear film, flexible packaging and cold seal material, they were able to reduce their waste bill by \$3,300 from November 2015 to February 2016. Lydia Kuyawa, Waste Management Diversions Account Specialist, who advised Prairie State Group to consider baling their waste says, "Just by taking material and reconfiguring it into a type that's acceptable is saving."

By opening up a dialogue on Prairie State Group's environmental business practices with Dan Doherty, Executive VP of Operations at Prairie State Group, Lydia was able to connect them with Bramidan to find a practical baling solution. They began with a free trial of a Bramidan B6030 baler in their Franklin Park facility. By testing the baler on their different waste types, they were able to measure the amount of waste generated on site. "40% of our waste is either reused or recycled," says Dan. As a result, they are now able to analyze which is the largest waste stream.

With a high production facility, there is constant movement of waste. Lydia and Dan continue to monitor and analyze the outflow of material and the benefits of baling their recyclables. "At the end of the day," says Lydia, "they're taking less out of pocket as opposed to before."



**PRAIRIE STATE GROUP**  
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Franklin Park, IL 60131  
[www.psglabels.com](http://www.psglabels.com)

#### RECYCLING FACTS

Company goal to reduce and eliminate any products going to landfill and by reusing and repurposing.

Installed Bramidan 60" baler to compact 26,000 lbs. of monthly waste.

40% of their waste is either used or recycled.

Less money out of pocket spent on waste removal.

Baler Process in Photos









Prairie State Group  
PACKAGING. CLARITY.

## Green Initiative

Winner of the 11<sup>th</sup> Annual FTA Environmental Excellence Award  
competition in the category – Process Improvement.



"Going Green" program with Constellation New Energy  
i.e. financial support of wind farms

2016

# Three Companies Take Top Honors in the FTA Environmental Excellence Award Competition

The Flexographic Technical Association (FTA) is proud to recognize three of its member-companies in the 11<sup>th</sup> Annual FTA Environmental Excellence Award competition for their outstanding environmental achievements. With competition the heaviest in the history of the awards, these exceptional companies rose to the forefront. Paragon Label of Petaluma, CA and Prairie State Group of Franklin Park, IL share top honors in the Process Improvement category, while PolyCello of Annerst, Nova Scotia won in the Technical Innovation category.

"Having been a judge several times, it was exciting to see so many companies submitting entries this year," says award judge Michael Rovogoin, of Tension Envelope Corporation. "The efforts have increased from a single element to concerted efforts in overall facility environmental management. While many of the practices were known techniques, the way [these companies] combined several areas of concentration into an overall program, promoted the process internally and involved the whole of the company was impressive. It is good to see the effort being expended toward environmental stewardship."

#### PARAGON LABEL - PROCESS IMPROVEMENT

Paragon Label, an FTA member for nearly 20 years, is committed to producing the highest quality labels to its customers. Paragon's parent company, Mrs. Grossman's Paper Company, is one of the largest sticker manufacturers in the world. The company's sustainability accomplishments are highlighted proudly on its Web site.

Paragon Label has been installing and innovating environmentally-friendly applications and practices for many years. The company has been recognized by numerous regional and industry organizations for its sustainability efforts, and now adds the prestigious FTA Environmental Excellence Award to its list of honors.

#### PARAGON LABEL



The company's efforts are far-reaching within the facility. One hundred percent of Paragon's 185 tons of yearly solid waste is recycled. The company cut energy use by 70,000 kwh by retrofitting its lighting system, and it has used sustainable practices in landscaping to cut water use by 50 percent in 4 years.

Paragon's "Green Team" employee committee meets 2 or 3 times each month to discuss ways to become more sustainable. The committee introduced the "In Good Company" initiative to focus on sustainability issues and the company's role and commitment to addressing them. Another campaign, "The Company We Keep," consists of a wall filled with posters and photographs in the lobby to showcase and celebrate Paragon's own sustainable achievements and its label customers' environmental milestones. Paragon partners with other local companies to brainstorm possibilities for promoting a mutual sustainability vision.

Paragon Label believes that the more it promotes sustainable practices, the more it will influence its employees, their families and those outside the company. Each year, nearly 30,000 visitors tour the Paragon factory and learn about the company's philosophy, which is to become more accountable and dedicated to sustainable practices. Paragon's wastewater treatment plant, which processes 72,000 gallons of water, is a big hit with the visitors.

"Paragon Label's entry was an excellent demonstration of involving the workforce to implement change through a team approach in recycling efforts and take the stress off of the environment," says award judge Jay Downey, of InterFlex Group.

Award judge David Wallack, of International Paper, agrees. "Their presentation included a nice mixture of meaty, specific metrics on reducing carbon footprint vs. interesting anecdotal information."

#### PRAIRIE STATE GROUP - PROCESS IMPROVEMENT

Prairie State Group (PSG) joins Paragon Label as a winner in the Process Improvement category. PSG is a relatively new FTA member, having joined in 2009. It is a custom printer and laminator of flexible packaging and pressure-sensitive labeling, and it specializes in both narrow and mid web flexible packaging. PSG's accomplishments in sustainability include numerous initiatives, such as efforts to reduce the amount of waste sent to landfills and to decrease the use of energy and natural resources.

PSG's remarkable results stem from its Great Ideas for Today (GIFT) program, an incentive program that garnered 93 new ideas from employees. Several of these ideas have been implemented to reduce PSG's environmental footprint while saving the company money.

A recycling program for ink and solvent drums helped reduce PSG's waste stream. Recycling solvent drums preserves the natural resources that are used in creating new ones. PSG also developed a program to reuse dirty press wash, further reducing the amount of virgin solvent used and the number of drums required. Reusing solvents and reducing the amount of hazardous waste generated may enable the company to lower its generator status with its local regulatory agency, as well.



PRAIRIE STATE GROUP

By partnering with a company that regrinds waste rolls, PSG further reduced the amount of solid waste going to the landfill by nearly 50 percent and now saves nearly \$45,000 per year. Corrugated waste is being recycled, as are end boards and cores. Increasing the efficiency of its pollution-control device allowed PSG to cut natural gas usage 23 percent. And finally, all waste paper, plastic and aluminum cans in the office are recycled.

"Prairie State Group shows that environmental stewardship goes hand-in-hand with a well-run, efficient operation," says awards judge Michael Impastato, of Flint Group. "The line between environmental excellence and lean manufacturing



POLYCELLO



# Waste Management Recycle America Jan-July 2016 Recycling Benefits for Prairie State Group

In Jan-July 2016, we recycled 43 tons of OCC, Mixed Paper and Plastic

These recycling efforts conserved the following resources:



## 240 Mature Trees

Represents enough saved timber resources to produce  
2,973,600 sheets of newspaper!

## 240 Cubic Yards of Landfill Airspace

Enough airspace to fulfill the annual municipal waste  
disposal needs for 308 people!

## 117,243 Kw-Hrs of Electricity

Enough power to fulfill the annual  
electricity needs of 11 homes!

## Avoided 98 Metric Tons (MTCO<sub>2</sub>E) of GHG Emissions

The recycling of these materials  
prevented these GHG emissions!

## 140,000 Gallons of Water

Represents enough fresh water to meet the daily fresh  
water needs of 1,866 people!

Sources: U.S. Environmental Protection Agency, International Aluminum Institute, National Association for PET Container Resources, Institute of Scrap Recycling Industries, Earth Works Group Recycler's Handbook, One Earth Recycle, Bring Recycling.org, National Recycling Coalition, US Forest Products Laboratory, and Waste Management. © Waste Management 2015

