



2014 Green Tier Annual Report

Executive Summary

For over 120 years Fredman Bag has been committed to maintaining our environment. In fact, the company was founded on the process of recycling. Used burlap bags were bought back from farmers and feed mills to be repaired then resold again and again. As the company has grown and evolved that same commitment has remained as a top priority.

Fredman Bag was accepted into the Green Tier Program on May 14, 2012 as a Tier 1 Participant. One of the core values of Fredman Bag includes strong relationships – partnering with employees, customers, regulatory agencies, and suppliers. Fredman Bag recognizes and accepts its responsibility to be a good steward of the environment and to help achieve a state of sustainable development.

Environmental Performance

Goals for 2014:

1. Install automatic dampers to control the opening and closing of the exhaust hoods in Converting along with adjusting the speed of the exhaust fan accordingly.
 - Added automated dampers and associated variable speed drive controls on our process exhaust on all eight converting machines to limit wasted heat and electricity.
 - Used dry ice cleaning service to clean the fan blades of the two rooftop exhaust fans to maintain blower efficiency.
 - Replaced a 10HP vortex blower with a 7.5HP vortex blower, servicing the process. Improved cleaning and maintenance allowed for this reduction in wasted energy and reduction in ambient noise levels.
2. Replace T12 lighting on P2 press, at employee entrance, and in the film staging area.
 - Removed 1650w of old 8' T12 lighting and replaced it with 1344w of 4' T8 lighting.
 - Replaced 1140w of old 4' T12 lighting in our customer service area with 333w of LED lighting.
 - These changes in lighting allowed for a wattage reduction in addition to a significantly higher quality and output of light in the targeted areas.
3. Sponsor an E-waste day for employees to bring in electronics for disposal.
 - This could not be completed with the waste company being used in 2014. This will be revisited in 2015 with a new waste recycler.
4. Promote alternative transportation for employees.
 - Posted transit guide in employee lunchroom.
 - A bicycle rack is available for use in warmer months.
5. Reduce energy costs by installing a small 7.5HP compressor dedicated to supply air to the RTO.
 - 7.5HP compressor is installed to run targeted critical pneumatic loads on the weekends eliminating the need to run the 50HP or 100HP compressor during the plant downtime.
6. Add additional items to our recycling program. Other plastic (PET, laminated films, stretch wrap, banding) in addition to the PE and PP. Aluminum and other metals.
 - 388,100 Lbs. of material were recycled in 2013. In 2014 this increased by 122,289 Lbs. to a total of 510,389 Lbs.
 - Materials included in this increase were electronics, fuel pellet, plastic bottles, metal ink pails, plastic core plugs and machinery.
 - Reduced waste sent to landfills from 15 tons in 2013 to 12 tons in 2014.



DNR Relationship

Green Tier is helping in our sustainability efforts by providing guidance and resources. Also by partnering with the WDNR through Green Tier, we can talk directly with the WDNR with a single point of contact to identify opportunities and solve issues in an open and efficient manner.

Conclusion

In 2014, we built upon the efforts of 2013 with increased sustainability efforts on a company-wide basis. Continued efforts to replace lighting with more efficient types lowers energy demand and costs. Energy demand and costs were also lowered by installing variable speed drives and right sized devices for production. We saw a 31.5% increase in the amount of materials being recycled and diverted from landfills. The economic impact of these efforts resulted in lowered costs associated with compacted waste removal and an increase in the amount of sales paid back to the company for recycled items that had previously been part of the landfill waste. We are optimistic that by the end of the 2015 calendar year we will be completely landfill-free. Our focus will be on recycling and reuse.

Our goals for 2015 include the following:

- Install still system to reclaim solvent.
- Replace (34) T12 light fixtures with energy efficient 4'T8 or LED units.
- Sponsor an E-waste day on Earth Day for employees to bring in electronics for disposal and provide paper shredding for documents.
- Partner with recycler to cut landfill waste by 50% with the eventual goal of zero landfill waste by the end of 2015.

**WISCONSIN DNR GREEN TIER
SUSTAINABILITY METRICS**

Period Covered: 2014

| | |
|----------------------------|--|
| Company Name: | Fredman Bag Company |
| Facility Name: | |
| Address: | 5801 W Bender Ct |
| City, State, Zip: | Milwaukee, WI 53218 |
| Environmental Coordinator: | Ken Hennen |
| Coordinator Phone: | (414) 462-9400 Ext 113 |
| Coordinator E-Mail: | khennen@fredmanbag.com |

| Metric | Not Collected/ Not Available | Quantity | Units | Period - if not Calendar Year |
|--|---------------------------------|----------|----------------|----------------------------------|
| DEMOGRAPHICS | | | | |
| Sales | X | | | |
| Money saved because of material or process improvement | X | | \$ | |
| Profit or Loss | X | | % | |
| Employees | 60 | | Each | |
| Multiple between highest paid and lowest paid employee | X | | % | |
| Alternative Transportation Support | X | | \$ or ? | |
| Total Purchases | X | | \$ | |
| In-State Purchases | X | | \$ | |
| % of Purchases Made from Companies that participate | X | | % | |
| LAND | | | | |
| Total Land | | 103909 | Sq Ft | |
| Paved/Covered Land | | 77828 | Sq Ft | |
| ENERGY | | | | |
| Electricity | | 1619830 | kWh | 01/20/2014 |
| | X | | % reduction | to 12/17/2014 |
| Natural Gas | | 108452 | btu | 01/19/2014 |
| | X | | % reduction | to 12/16/2014 |
| Renewable Energy (generated on-site) | X | | % of total use | |
| Renewable Energy (as a % of utility electricity mix) | X | | % | |
| WATER | | | | |
| Total Water Used | | 2318 | Ccf/year | 11/13/2013 |
| | X | | % reduction | to 11/12/2014 |
| Source - private well | X | | % of total use | |
| Source - public system | | 100 | % of total use | |
| Water Recycled/Reused | X | | gallons/year | |
| | X | | % reduction | |
| Regulated Pollutants Discharged (BOD, TSS, Metals) | X | | lbs/ year | |
| | X | | % reduction | |

| AIR | | | | |
|---|---|--------|--------------|--|
| Total Air Emissions | | 41922 | lbs/ year | |
| | X | | % reduction | |
| Ozone-Depleting Substances | | 161 | lbs/ day | |
| | X | | % reduction | |
| Greenhouse Gas Emissions | X | | lbs/ year | |
| | X | | % reduction | |
| WASTE | | | | |
| Hazardous Waste Disposal | | 63559 | lbs/ year | |
| | X | | % reduction | |
| Universal Waste Disposal | | 1047 | lbs/ year | |
| | X | | % reduction | |
| Non-Hazardous Waste Disposal | | 14.7 | tons/ year | |
| | | | % reduction | |
| Material Recycled/ Reused | | 510389 | lbs/ year | |
| | | 31.51 | % increase | |
| Recycled/ Reused Content | X | | % of product | |
| TRANSPORTATION | | | | |
| Hybrid Vehicles | X | | Each | |
| Gasoline Used | X | | Gallons | |
| Diesel Used - vehicles | X | | Gallons | |
| Diesel Used - Generators | X | | Gallons | |
| Alternative Fueled vehicles (CNG, LNG, Fuel Cell, Electric) | | | # | |
| ADDITIONAL METRICS | | | | |
| Please list all other designations/certifications (for example: LEED, Green Globes, Green Masters, Energy Star, ISO 14001): | | | | |
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