

Dollars from waste

Dion Label is reducing its environmental impact and saving money by having its waste pelletized – and by sourcing from environmentally aware suppliers.

Danielle Jerschefske investigates



As label converters continue to fall under Green scrutiny all the way up the supply chain, some farsighted companies are taking action to deflect the rising tide of inquiries while boosting their bottom line. One such company is Dion Label Printing located in Westfield, Massachusetts, whose owner John Dion discovered a Green solution to his waste removal problems two years ago. Dion happened upon International Paper Products', not International Paper Corporation, Westfield Converting Facility during a routine delivery and immediately he arranged to have a tour of the facility to learn more about the pellet processing operation there.

Dion discovered that International Paper Products' converting facility uses materials waste to create biomass pellets for use in coal-burning boilers in power plants. 'We presently save about half of the \$85-100 each ton that it costs to landfill in Massachusetts by pelletizing our waste,' says Dion. 'Because Massachusetts waste is taken out of state, landfill costs are quite high here. For less than half the cost of dumping the waste into a landfill, Dion Label is able to reap the economic and environmental benefits by working with International Paper.'

The vast majority of the converter's manufacturing and production waste - paper, film, and adhesive - is utilized by International Paper to create biomass pellets. The facility will accept some wooden pallets as well. 'Better than 90 percent of all our waste, including cardboard and packing materials, are pelletized,' Dion continues. The pellets provide a huge benefit to the user as well. They offer huge savings as the price per BTU is less than coal, and it burns cleaner.

Dion's transition into this form of waste pick was really simple; it only took about three weeks. The converter already had a compactor in place to recycle cardboard. International Paper supplied the container on a 6-year, rent-to-own basis. When the 40 yard container, which holds about 15 tons, is full, International Paper picks it up. The time from the pellet mill to Dion Label is not more than five minutes. So, not only is the converter saving bottom line costs and diverting waste from the landfill, Dion is also reducing the amount of carbon emissions released through the shipping process.

Dion says, 'We have been spreading the word about this option to other local converters, but I am not sure if anyone else has jumped on board yet.' Prior to signing a pick-up contract with International Paper, Dion tried to no avail, to get Waste Management involved.

'I do not see any weak points in the process,' says Dion. 'In fact, it offers a secure monitoring of security materials destruction and a

Harvesting light

Orion Energy Systems headquartered in Manitowoc, Wisconsin, has already installed, or has contracts to install, integrated lighting systems in many end users' manufacturing sites: Kraft, Sysco, P & G, and Coca-Cola.

The system Orion offers utilizes florescent lights, wireless controls for motion and time-of-day automation, and direct renewable lighting through the use of a proprietary light pipe. The light pipe is a specially designed 'skylight' type product that harvests daylight, diffusing it over 450 square feet with the use of the highly deflective metal, anodized aluminum.

A recent bill passed through Congress has defined natural light harvesting to be a renewable energy source and a low-cost, viable source of energy. Already, the company has saved its customers \$262 million and 3.4 billion kilowatt hours, in addition to reducing 3.3 million tons of carbon dioxide emissions and taking 340 Megawatts off the grid. Orion's system reduces the amount of energy used during peak and base consumption periods, and offers a 4-5 year payback. Better yet, with government incentives, tax reductions and rebates on retrofitted installations, some of its customers have managed a 2-year payback on the capital investment.

Orion installed its integrated lighting system at Quad Graphics in Wisconsin. With the investment, the printer cut energy consumption by fifty percent, gained fifty percent more light within the plant, and, most importantly, for commercial color rendering, the light quality increased significantly. Quad eventually removed all of its task lighting because the natural light provided the full spectrum of light to best match brand colors.

Bemis Manufacturing also realized annual savings of \$320,000 after installing Orion's integrated lighting system. The new system more than doubled existing light levels within the plant.



certificate of destruction is provided. It has been great for us. We'd certainly like to see the process expanded.'

Dion advises other converters interested in diverting their solid waste stream in a similar way to first contact a vendor who can pick up the waste and process it. 'If they are located too far away, then it may not make much sense to work with them; it's extremely important to take the distance into account.'

A converter can then take the next step in the process by working with its existing waste removal vendor so that the waste can be separated. He notes that it is crucial to make sure that the company is not locked into any long-term contracts with its current service provider.

Another choice of pelletizer is Pellet America, located in Appleton, Wisconsin, which has been providing a materials waste pick up service to local manufacturers since 1992. The company works very closely with The Channeled Resources Group. Pellet America's president, Lee Robbert, produces over 35,000 tons of pellets annually at his facility. 'It is Pellet America's goal to keep as much waste from going into the landfills as possible,' Robbert says.

The Pellet Fuel Institute, headquartered in Arlington, Virginia, says that there are over 80 pellet mills in North America. However, it has only two commercial pellet manufacturers registered as members: Fulghum Fiber Fuels in Augusta, Georgia and Pellet America. It may behoove those interested in transitioning to this form of waste removal to further investigate the opportunities available in the company's local area(s).

Energy saving effort

Waste recycling is not the only sustainable task that Dion Label is involved in. Dion has chosen Masterpiece Graphix, a specialty and digital materials coater, located in St. Louis, Missouri, to supply all of its digital materials. North America's first HP Indigo authorized treatment facility, Masterpiece

"North America's first HP Indigo authorized treatment facility, Masterpiece Graphix sources 100 percent of its plant's electricity through wind power"

Graphix sources 100 percent of its plant's electricity through wind power. President Doug Watson explains the company's choice: 'you need a leader to take the first step. We do pay a premium for sourcing electricity with a renewable energy, yet, there is environmental gain. When all comparisons between a competitor and us are the same - quality, speed, and service - we hope that our customers will recognize our stance. In taking the first step, we are differentiating ourselves from the competition. If everyone takes a little step, then our surroundings will be that much better.'

While St. Louis is a far cry away from Massachusetts, Dion feels that the renewable energy used to produce the materials offset the travel time to the East coast. 'We do not take the environment lightly and we really want to grow Greener,' Dion says. 'Masterpiece Graphix is the best out there for digital coating. We've tried other vendors, but are most impressed by the Masterpiece work. Their choice to use renewable energy helps us feel more comfortable sourcing material from their location.' ■

Randy Duhaime, General Manager; John Dion, Owner; Dave Dion, Owner

