

Going Green on a Budget

By Jim Parrie, CPE, Ph.D.

There are a myriad of reasons for going green within your facility. There is the marketing angle of being able to advertise how eco-friendly your company operates. There is the altruistic side of doing something for the planet. There is also the cost savings.

In today's economy, some of you might be saying, "I would love to go green, but I don't have the money right now." Green methods for the production framing industry range from more than \$1 million to free. What follows are a few ideas for going green that are free or low in cost.

Where to Start

For manufacturers in the North and in the Deep South, conditioned air is the biggest utility expense. Marc Bluestone, a former owner of a chain of frame shops, now owns Home Green Home in St. Louis, a building energy performance contractor. It is one of several enterprises in the emerging green market that conducts energy audits to determine how efficiently your home or business is using energy. Marc offers several ideas on how you can save money in your business.

"The most common form of energy waste is conditioned air," he says. "In the past if your room did not stay warm you called a heating contractor, who would just sell you a newer and/or bigger furnace. Much of the conditioned air in a building is lost through leakage. An energy audit uses sophisticated technology like thermal imaging to see where conditioned air is seeping out and non-conditioned air is seep-

ing in. Thermal imaging generally shows warm air moving up and out of a building through plumbing and venting in the roof, soffits, and eaves—anywhere there is an opening. Cold air moves in through doors and windows. We recommend sealing a building from the inside, starting with every light switch, outlet, window, etc.—anywhere there is a cut or hole in the walls, ceiling, or

flooring. Next we seal all cuts and holes in the attic. This is very inexpensive and doesn't take a lot of time."

A lot of factories just blow insulation in the attic to keep the conditioned air contained, but that can be inefficient. "There are several issues with blown insulation," says Bluestone. "One is dust. For many production framers, fighting dust generated by blown insulation can be a losing battle because it can go everywhere if you aren't careful. The biggest issue is that most building owners buy blown insulation from contractors by the cubic foot. When an installer blows it into an attic or crawl space, the insulation is puffed up with air. When you inspect the work it looks like a lot of insulation when it is actually mostly air. After a few days the air escapes and the insulation settles to its normal thickness, which is generally insufficient for most places. As a result, you have very little energy savings."



Thermal imaging done during an energy audit can reveal areas that show where non-conditioned air is coming in and where conditioned is leaking out of a facility.

Green Materials

One of the major green proponents in the industry is FramERICA, which has been using medium-density fiber (MDF) board for years to make Bonanza Wood™ mould-

How to make your framing facility greener for little or no money

ing. MDF products are an excellent method of going green while saving money and adding some operational benefits.

As with any product, there are a variety of grades of MDF board. It can be made from newly fallen trees or from recycled products. These range from old furniture and used pallets to demolished homes. (As with any product, there are cheap MDF mouldings in the market; this article refers only to high-quality MDF.)

From a design point of view, MDF products have come a long way. When MDF moulding first made its debut, you could spot it a mile away. Today there are so many new finishes, foils, and gesso combinations that you can't tell that many of the mouldings are made from MDF unless you look at the back. Because MDF is a manufactured product, you can achieve nearly 100 percent yield because there are virtually no defects.

Using such manufactured raw materials also means quicker turn-around times, which means higher customer service levels and smaller inventories. Some MDF moulding companies can design, manufacture, and ship large quantities of custom-made product within 48 hours. Since most high-quality MDF is made in the U.S., there is no waiting for containers.

At Framera's factory in Long Island, NY, the manufacturing process also incorporates many other conservation efforts. The company does many little things to keep costs down and to save the environment. At the factory, all light switches have motion detectors on them. These switches automatically turn the lighting

off when no one is in a room. No more walking into a factory on Monday and seeing dozens of lights left on over the weekend.

Dave Rosner, Framera's vice president of marketing, says his company has also slashed its utility bills by using sawdust as fuel in its furnaces. Plus, the metal halide lighting (the big lights in warehouses that look like silver salad bowls) was switched to high-efficiency fluorescent lighting. The work area is now brighter, and the utility bills lower. All factories can do this without much effort.

Wasted Corner Samples

Jay Goltz, owner of Artist's Frame Service and Bella Moulding, has been on a soapbox about the cost of corner samples for quite some time. The amount of money the industry wastes in corner samples is amazing. Many corner samples never see the light of day; they sit in closets and unopened boxes and eventually just end up in landfills. That represents wasted time, money, and natural resources.

Goltz estimates that the framing industry totals about \$2 billion a year and that moulding sales amount to about \$400 million of that. Corner samples, he says, cost the industry about 3 percent of that or \$12 million a year. He argues that the \$12 million for free samples is being paid for by someone, and that someone is you. Moulding suppliers have to figure corner samples into their cost of doing business just like you have to figure in the cost of advertising, marketing, and samples you make for your customers.

Also consider that many volume framers are subsidizing much of this expense. If a framer cannot afford to pay for his or her own advertising, sales, and marketing, why should you subsidize that company? A corner sample is a marketing tool. Every time a vendor sends out a free corner sample to an undercapitalized framer who can't use it or a framer who just puts that sample under a counter, those dollars are coming out of your pocket.

At a factory recently, I counted 32 unopened boxes of corner samples that were so old that the packing tape had yellowed and cracked. They represented hundreds of dollars spent by a vendor in hopes of getting some business. The owner of these unused samples said, "Why should I care? It's their money, not mine."

There is a way to reduce the corner sample problem, maybe by 50 to 60 percent. Several companies



Larger framing manufacturers, such as the Framera plant on Long Island, use systems that collect dust and feed it to furnaces to heat the facility in colder weather.

make visualization software, which allows a customer to see a picture before it is framed. The price of this software is now as low as \$16 a month. The benefits of visualization for volume framers include quicker sales, higher customer satisfaction levels, reduced manufacturing costs, higher close ratios and average ticket prices, and fewer production and shipping errors.

There are also green benefits. First, with visualization software you no longer have to make samples without glass for interior designers or buyers, shoot a photograph of the item, send it back to production to reinstall the glass into the item, and then ship the item across the country to the buyer. With visualization software you create several designs “virtually,” then e-mail the images to the buyer.

Once a buyer agrees on a design, you can ship a prototype or small samples of the raw materials. (A caveat here. Send physical samples of all raw materials to a buyer until you have a rock solid relationship.) Due to variations in color calibration, what appears on a computer monitor as black to them may actually be dark blue. Color balance varies with the make, brand, and model of the monitor. Always make sure the buyer sees a physical sample. The sample can be just a 4" rail and a color swatch. Instead of the design/bid process taking days or weeks, it now can be done in a few minutes. Think of the materials and shipping costs saved by using e-mailed images instead of physical pieces. Think of the trees and fuel saved. Think of the money saved.

Here is a moulding sample minimization program. In some visualization programs, once the image is stored you never need to photograph the moulding again. Visualization programs have a database that stores an image and matches it to an SKU or moulding number. So you do not need a “corner” sample per se, just a piece of moulding for a customer to touch and feel. Corner samples were developed so a customer could visualize what a frame would look like when completed. With visualization software, everything is done on a computer in less than 30 seconds. So why do you need a corner sample and not just a rail sample?

I have asked a few clients to switch from corner samples to 6" to 10" rails. The 6" rails take up less than 40 percent of the space of conventional corner samples, allowing for more finished custom design samples to be displayed. The impact of this concept on moulding ven-

dors could be huge. Using 6" rails would save more than 50 percent of the raw material while drastically reducing labor costs. Shipping costs would also nosedive because rails weigh less than full corners and can be placed in small shipping pouches instead of large cardboard boxes.

If eliminating your corner samples seems risky, then replace 25 percent of them with rails. See if it works. It will help keep your material costs down and, by using visualization software, will present a more professional image to clients.

No More Road Warriors

Traveling is not like it once was. It is now long security lines, cancelled and delayed flights, \$4 bags of peanuts that were once free, extra fees for bags, and—soon—coin-operated toilets on planes. Many of my clients are now using webinars and video conferencing instead of travel.



Webinars—meetings held over the Internet—can speed up decision-making and eliminate the need for executive and sales travel.

Video conferencing minimizes the need for travel, multiple e-mails, and phone calls. If you do business with designers, decorators, or buyers, try using video conferencing tools like GoToMeeting™ or WebEx™ in conjunction with visualization. This allows you to instantly show a buyer a design, price it out, and brainstorm a project—while never leaving the comfort of your office. You can get done in one 15-minute videoconference what used to take dozens of e-mails and phone calls and maybe even a long airplane ride.

Webinars are growing in popularity. They are basically seminars, lectures, or classes conducted over the Internet with full video, audio, and hands-on interaction. This allows you to send your staff to be trained—without them ever leaving the factory. There are no travel-related costs and or lost productivity days, and you know for sure they went to the class and not go to see the Blue Man Group instead. The cost of a webinar can be free (for vendor-sponsored events) or up to \$50 per session.

Everyone Wants Solar

Last summer, when oil hit \$150 a barrel, numerous clients and prospective clients called inquiring if anyone was using solar. The simple answer was, “No.” There are some solar/gas-operated kiln dryers being used, but that seems to be the extent that the industry has really delved into solar energy. During the semi-crisis, several clients were at various stages of investigation and due diligence—but no one pulled the trigger. And as the price of oil fell,



With new legislation, there are added incentives to use roof space for solar power equipment. The electricity can be used at that facility or as part of an energy credit exchange with another company.

so did the urgency of switching to solar. But it remains promising. Here's what's happening.

Factors That Make Solar a Good Investment

1. Net-metering laws — These are laws enacted by most states to allow consumers of renewable energy to sell back electricity to the power grid. In simple terms, when you are hooked up to wind or solar you still have an electric meter from your local utility company. When your energy use is less than the amount your solar/wind generation system produces, you have excess energy. When you have excess energy your meter will spin backwards. That means you are reducing your utility bill. In some states, if you produce more renewable energy than you use then the utility company has to buy it back from you at the wholesale or “avoided cost” price, which is much less than retail.
2. Monetary incentives — There are federal tax credit programs available for utility customers who install renewable energy generation systems. Some of these credits are quite substantial. Tax credits are different than tax deductions in that you reduce your taxes by a dollar for every dollar spent. In addition, the \$785 billion stimulus plan expanded the size and scope of the renewable energy tax credits. When you are considering renewable energy, check with your CPA to see what deductions and tax credits you may receive.
3. Leasing roof space — Some commercial buildings and industrial manufacturers want to use solar but do not have sufficient space for the panels. This can be a windfall for you because you can lease your roof space. Most framing factories have a lot of roof area. You can rent or lease this space to someone else, allowing that company to put up its own solar panels. A company does not have to be next door to you for this to work. It will get credit for the amount of energy generated back to the local utility company.

4. Venture capital investment — Venture capital firms might be interested in placing a solar or wind turbine system in your facility as an investment. The cost to you can be 90 to 95 percent of what you would pay your local utility company. You can reduce your utility bill by 10 percent and lock in cheap energy now with little or no money down. Do you really think the cost of electricity is going to stay at its current level for the next 10 years?

Empower Your Staff

Finally, another method of going green is to empower all of your staff. Have them look for ways to reduce all costs, not just energy costs. When they have a good idea, make a big deal of it in your factory meeting. If it is worth it, give them a few bucks. At one factory I visited, a delivery guy noticed how many small dumpsters there were on-site. He came up with the idea of using tipster-type dumpsters, which reduced the number of loads the waste handler had to make. This saved the company \$6,000 a year. The owner presented the driver with a \$300 Best Buy gift certificate. Now all the employees are looking for ways to save the company money. ■

Jim Parrie, Ph.D., CPE, a 30-year veteran of the framing industry, has owned and operated small frame shops, galleries, and wholesale operations to high volume OEM facilities. Currently, he owns Millennial Technologies & Consulting International, a consulting firm to high volume framers, retail chains, and manufacturers throughout the world.