



By Stephen Murdoch

Reducing our Environmental Footprint

When a structure is being demolished, what happens to all of the materials? Each year, thousands of structures are demolished and the unwanted materials are sent off to landfills. Unwanted construction and demolition debris is piling up in landfills across the country. In response to this, industry stakeholders are looking at ways to reduce, reuse and recycle materials that remain after a construction or renovation project. Nowhere is this movement more evident than in Connecticut and New England.

Mark Lennon, co-founder of The Institution Recycling Network (IRN), a cooperative that improves financial and operating results in recycling and waste minimization for public and private organizations, understands the value of reducing our environmental impact. Once a structure is slated for demolition, Lennon and his team make it their business to save as much of its contents and materials as possible from ending up in a landfill. Whether it's computers or cardboard, fluorescent lamps or surplus furniture or construction waste, IRN is committed to diverting waste from disposal.

Who is IRN?

Established in 1999, IRN is a cooperative, member-led organization that has grown by leaps and bounds. IRN was founded on the recognition that most organizations can improve their recycling performance, both operationally and financially, by taking advantage of cooperative marketing and purchasing opportunities. IRN's members and clients include colleges and universities,

independent schools, hospitals, private corporations and other organizations from five New England states, New York and across the country.

Since opening their doors, IRN has recycled close to 100 different materials, and they're particularly well known for their work in construction and demolition recycling. As a one-stop-shop for recycling so many materials, Lennon knows firsthand the current trends in construction recycling and reuse. "The current economy is likely to have much more impact on construction in general than on sustainable construc-

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tion, and recycling specifically," Lennon says. "Sustainable construction is where the industry is headed. Uncertainty over the future of the economy will drive out the most speculative projects, those driven by desire for short-term profit, and not those constructed for long-term returns. Throughout the country, and certainly in Connecticut and the Northeast, reuse and recycling are much less expensive than throwing construction waste away. So not only are there social, environmental and sustainability benefits in recycling, there are economic benefits as well."





Goal is to make recycling simple and cost effective

Through the years, IRN has worked on several high-profile projects that have garnered accolades from across the industry. Says Lennon, "Yale Medical School is a great example both of reuse of materials and of the potential to recycle on a relatively small scale in an interior renovation. The School and its contractors have been committed to finding ways to reuse surplus furnishings from interior reconstruction, and have started every project by cleaning out the existing labs and offices. That gives them a 100 percent recycling rate on tons of material before the project has even started. After that, we use a variety of means to get small quantities out for recycling. The goal is to make recycling as simple and cost effective as possible by placing containers close to the work, matching containers to each waste, and producing loads of homogeneous materials to send to recycling markets." In half a dozen projects at YMS, IRN and YMS contractors have achieved average recycling rates well over 90 percent.

As one of the most experienced recyclers of construction and demolition waste in the country, IRN has fielded inquiries from many states. "We are seeing a shift in how organizations are dealing with their construction waste. The cost to recycle construction wastes is often tens of thousands of dollars less than the cost to throw them away. Between economics and a growing interest in sustainability, we're seeing demand for recycling from more and more owners, architects, and contractors. Other well known IRN clients include the Boston Scientific Corporation, First Church of Christ Scientist, Harvard University, and the University of New Hampshire. In addition to developing a plan to handle wastes on the jobsite, IRN provides training to contractor and subcontractor personnel, on-site management, hauling, and marketing of the recycled materials."

Sustainable building is key

Aside from helping to keep unwanted construction and demolition debris out of landfills, IRN is a strong supporter of the LEED Green Building Rating System. Working

alongside architects and contractors, IRN provides the necessary tools to have a measurable impact on building performance. "The IRN can do more than deliver the two to four LEED points associated with waste management and recycling," says Lennon. "Our staff are experts in other aspects of sustainable building and can help achieve cost-effective LEED points in areas such as indoor air quality, use of recycled materials on the job site, and translating sometimes complex LEED criteria into language that everyone on the site can understand."

According to Lennon, the biggest misconception is that reusing and recycling construction and demolition debris is a major undertaking. "Good planning is the most important part of construction waste management. But once a blueprint is in place, it's easy to move forward and succeed. A strong plan allows you to identify all recyclable materials and know how you're going to manage them prior to the start of a job. Good planning will also address how each waste material will be handled and where each material will be marketed. Ultimately, good planning covers communications, training, and troubleshooting, and lays out tracking and reporting procedures for LEED or other documentation. But like a good blueprint, when the plan is in place, it's easy to follow, and makes recycling straightforward for everyone involved."

"When all is said and done," says Lennon, "reusing and recycling of construction wastes makes total sense, especially here in the Northeast. The environmental, economic, and social benefits are practically endless. National green building standards like LEED have increased the emphasis on recycling and reusing, and the industry as a whole has started to respond. Our landfills are filling up an alarming rate, but almost all of the construction wastes that we're throwing away can be recycled or reused. We as an industry have an obligation to reduce our environmental impact. If we can do that and save money at the same time, there's no reason we shouldn't be recycling on every jobsite."

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