



# 2009 Early Adopter Project Case Study Report

Glenwood Signs & Awards, Inc.

IN COOPERATION WITH UW-SUPERIOR  
NORTHERN CENTER FOR COMMUNITY  
AND ECONOMIC DEVELOPMENT

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# SUSTAINABLE TWIN PORTS 2009 EARLY ADOPTER PROJECT CASE STUDY REPORT

## Glenwood Signs & Awards, Inc.

### Background

In 1991, Scott & Laurie Davis began working at Glenwood Signs when it was a small engraving shop. Their task was to expand the business to include awards and signage. Now owners of Glenwood Signs & Awards, Inc., they offer a wide variety of engraved products, trophies and awards as well as vinyl signs, banners, vehicle signs, printed graphics, sand blasting, laser engraving and a multitude of other products. They are known for their ability to serve unique needs and the relationships they build with their loyal customers. Trading services and customer recommendations with other locally-owned businesses along their block has created a close-knit neighborhood. Glenwood Signs & Awards operates with a staff of four to five employees in the center of downtown Duluth, a city of approximately 84,000 residents on the westernmost tip of Lake Superior.

### Beginnings

Since the Davises began work in this industry, they have been keenly aware of the ways in which their business impacts the environment. A desire to come to grips with these realities and to approach them with a new perspective opened the door to training in The Natural Step framework. When a vinyl sign is produced, only a small percentage of the vinyl material ends up on the finished sign, while the majority is thrown away. What to do with this waste has been an issue since the beginning. Many of the products used in the industry are specialty synthetics, like resins and acrylics, with no recycling options available. Necessary materials often involve transportation from overseas and local options are scarce. The purchasing power of a small company like Glenwood presents challenges in securing small quantities of any new, more sustainable products. The Davises saw this training opportunity as an avenue for bringing their personal belief in an environmentally-friendly lifestyle to their business, at least to the extent currently possible in the signage industry.

For all fourteen organizational teams in the Early Adopter Project training in The Natural Step (TNS) framework, identifying their current reality in relation to the four principles of sustainability was the first step. This table gives an overview of those practices, policies and processes that were already in line with the TNS principles of sustainability.



*Scott and Laurie Davis, owners of Glenwood Signs & Awards, Inc., in Duluth,*

## Baseline Analysis – Sustainable Practices, Key Assets and Building Blocks

<p style="text-align: center;"><b><u>Sustainability Principle #1</u></b></p> <p><i>A sustainable society does not contribute to systematically increasing concentrations of substances extracted from the Earth's crust</i></p> <ul style="list-style-type: none"> <li>○ Local vendors</li> <li>○ Control over ordering/decision making</li> <li>○ Ability to produce in-house products</li> <li>○ Greener products coming on the market, variety of products to choose from</li> <li>○ Building ownership</li> <li>○ Tools to make better use of material</li> </ul>	<p style="text-align: center;"><b><u>Sustainability Principle #2</u></b></p> <p><i>A sustainable society does not contribute to systematically increasing concentrations of man-made substances</i></p> <ul style="list-style-type: none"> <li>○ Recycling program</li> <li>○ More eco-friendly/recyclable products</li> <li>○ Eco-solvent ink</li> </ul>
<p style="text-align: center;"><b><u>Sustainability Principle #3</u></b></p> <p><i>A sustainable society does not contribute to systematically increasing degradation of the Earth by physical means</i></p> <ul style="list-style-type: none"> <li>○ Local vendors</li> <li>○ More options coming on the market</li> </ul>	<p style="text-align: center;"><b><u>Sustainability Principle #4</u></b></p> <p><i>A sustainable society does not contribute to systematically undermining peoples' capacity to meet their own needs</i></p> <ul style="list-style-type: none"> <li>○ Company ownership/control</li> <li>○ Ability to make changes/restructure</li> </ul>

The second step in the process was to identify current practices that were not in line with the principles. The table below highlights opportunities for moving toward sustainability by identifying areas where more sustainable actions could be implemented.

## Baseline Analysis – Unsustainable Practices

<p style="text-align: center;"><b><u>Sustainability Principle #1</u></b></p> <p><i>...concentrations of substances extracted from the Earth's crust</i></p> <ul style="list-style-type: none"> <li>○ Shipping/transportation of goods</li> <li>○ Vinyl supplies</li> <li>○ Metals (aluminum, brass, steel)</li> <li>○ Plastic materials</li> <li>○ Electricity (from coal)</li> <li>○ Steam heat (from coal)</li> <li>○ Plastic resin products</li> </ul>	<p style="text-align: center;"><b><u>Sustainability Principle #2</u></b></p> <p><i>...concentrations of substances produced by society</i></p> <ul style="list-style-type: none"> <li>○ Shipping/transportation emissions</li> <li>○ Waste produced during manufacturing (vinyl, plastics, metals, chemicals)</li> <li>○ Products that have a short life (throw aways)</li> <li>○ High use of inefficient lighting</li> </ul>
<p style="text-align: center;"><b><u>Sustainability Principle #3</u></b></p> <p><i>...degradation of the Earth by physical means</i></p> <ul style="list-style-type: none"> <li>○ Paper usage</li> <li>○ Electricity/steam heat from coal</li> <li>○ Shipping/transportation of goods</li> <li>○ Plastics/vinyl (drilling of petroleum)</li> </ul>	<p style="text-align: center;"><b><u>Sustainability Principle #4</u></b></p> <p><i>...peoples' capacity to meet their own needs</i></p> <ul style="list-style-type: none"> <li>○ Low wages</li> <li>○ No benefits</li> <li>○ Loud workplace</li> <li>○ Chemical use and exposure to fumes from plastic</li> </ul>

## A New Vision for a Sustainable Future

The Davises aspire to a new vision for the future of their company, captured here: “To be a company that provides its customers with the most sustainable signage and award options available, produced in a sustainable manner.” They generated this list to describe what that future might look like:



In the future, as a sustainable organization in a sustainable society, our main characteristics include:

- Products produced from natural or recycled materials
- Energy efficient shop/operations
- Provide satisfactory and pleasant employment
- Recycle or reuse all waste products
- Most products and materials purchased from local vendors

Steps to achieving that vision were generated during a brainstorming session in answer to these questions: “What would our organization look like without sustainability violations?” and “What would we be doing?”

- Insulate roof to lower steam use
- Use more locally-produced materials
- Turn off equipment when not in use
- Change current fluorescent lights to more efficient ones
- Install skylights
- Develop more in-house products
- Develop more sustainable products
- Promote recycling through return/credit policy programs
- Develop better ordering practices to reduce shipping
- Work to make best use of all materials to reduce waste
- Expand in-house recycling/research more options
- Work to produce higher profits to offer employee benefits
- Research low-cost options for employee benefits



### Actions – Outcomes – Metrics

Having limited staff time away from the shop to devote to ‘homework’, Scott and Laurie laid out their agenda with a straightforward approach. Their five focus areas were: stakeholders, products, employees, waste and energy.

#### Goal 1: Stakeholder Education

Educate customers about sustainability and recommend to them more sustainable choices

Action 1: Signage about sustainability in the store

Action 2: Display of sustainable products to promote better choices

Outcomes: These actions were quickly incorporated and have generated new business, more choices in the product line and general awareness of the business goal of moving toward sustainability.

Example: The Douglas County Land and Water Conservation Department needed to recognize the ‘Wisconsin Farmer of the Year’ on Conservation Observance Day and came to Glenwood looking for signs and awards to be used for the celebration. The Board initially was not going to award Glenwood the contract because it is a Minnesota (and not a Wisconsin) company. When Glenwood Signs demonstrated that its production processes were more sustainable than the other options being considered, it was awarded the contract.

#### Goal 2: Product Line

Find manufacturers using more sustainable practices and products, located as close as possible to Duluth, MN

Action 1: Research online for product manufacturers

Action 2: Request sustainable products, less packaging, and recyclable/reusable packaging from suppliers

Outcomes: Located source of locally, sustainably harvested wood for plaques and added new plaque options (walnut and alder); added bamboo plaques to product line; created a line of wooden medals and awards.

### Goal 3: Internal Education

Change internal behaviors and habits that are unsustainable

Action 1: Encourage, remind of, demand and demonstrate new habits, including turning off lights, thinking before you throw and recycling if you can, and choosing what you use

Outcomes: This is an ongoing process and, as all changes are, one of the most difficult.

### Goal 4: Reduce Waste Stream

Implement aggressive recycling efforts to reduce the waste stream going to the landfill

Action 1: Work with waste hauler to change size of bins for both waste and recyclables

Action 2: Provide more bins in work areas to make recycling process efficient

Outcomes: By increasing recycling practices, waste was reduced by more than 50% (by volume).

### Goal 5: Reduce Energy Use

Reduce energy use by changing existing incandescent bulbs to compact fluorescent bulbs and change T12 fluorescent bulbs to T8 bulbs.

Action 1: Research costs for complete changeover; research funding options

Action 2: Begin replacing failing bulbs immediately with low-energy alternatives

Action 3: Install insulation in the roof

Outcomes: About half of the existing fixtures have been changed over, with a goal of finishing the changeover in the winter of 2011. Roof insulating has been delayed until the economy and cash flow recover.

## Lessons Learned, Challenges Faced, Barriers Overcome

- “Our industry is not ready for sustainability, and as a small business we don’t have the buying power to force them into a change. We’re still struggling to get the products we want, especially in a small city where our competitors are not interested in working together on cooperative purchasing.”
- “The training helped us regain focus and clarity on what we do and why we do it. We know these are the ‘right’ things to do; now we can tell you ‘why’ they’re the right things to do.”
- “This has really helped us prioritize our list of ideas, and having a tool to evaluate the ideas is the key.” (Referring to TNS’s three strategic questions when considering action ideas: Does this take us in the right direction toward our vision? Is it a flexible platform? and, Does it provide a sufficient return on investment?)

## Next Steps

These are some current projects on which Glenwood Signs & Awards is working:

- Finishing the conversion of T-12 lighting fixtures to T-8’s
- Insulating the roof when it becomes financially viable
- Adding screen printed signs, which will produce less waste than vinyl signs
- Continuing to look for the most sustainable inks and materials to work with





Attachment A: These flow charts show the changes in priority for Glenwood Signs & Awards.

