

“Green” or sustainable buildings have the following benefits:

- *Energy efficient - reduce costs, green house gases, demand on power plants, and the dependence on foreign oil;*
- *Resource efficient – reduce demand on water supplies, sewers, as well as reduce the waste going to landfills;*
- *Encourage urban development, and the use of local, sustainable resources;*
- *Improved employee health – reduced toxics and increased daylight usage may result in increased worker productivity and reduced sick leave; and*
- *Support green building material development and services industries and jobs.*

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Green Construction and Demolition/ Green Buildings

2007 P2 Annual Report Addendum

The construction and operation of homes and commercial buildings contribute significantly to the land use and transportation impacts in Michigan as well as the funds that leave the state to energy suppliers for meeting our energy needs. They also contribute to environmental impacts. According to the U.S. Green Building Council, buildings are responsible for about:

- 2/3 of total U.S. electricity consumption,
- 1/3 of total U.S. greenhouse gas emissions,
- 136 million tons of construction and demolition waste in the U.S.,
- 1/8 of potable water in the U.S.,
- 40% (3 billion tons annually) of raw materials used globally.

Efforts known as “green” building and deconstruction or demolition recycling are working to minimize these impacts. Michigan is one of the leading states in this effort. Supporting this is the Directive the Governor issued on Earth Day 2005 that requires state building construction to be done to green standards. This was also included in the Governor’s Executive Directive 2007-22.

You can see the growth in the green building in Michigan in the graph below. This represents the Michigan green buildings registered with the U.S. Green Building Council under the Leadership in Energy and Environmental Design (LEED). Michigan also has many residential homes being built to green standards that are not included in this total.

Typical new construction and renovations result in many usable construction resources, such as bricks and lumber being landfilled. Preventing that could reduce the demand for new resources and reduce construction costs. In addition, historical architecture is being lost when older buildings give way to new or urban development. To reduce this, DEQ resources are being expanded to assist in recycling construction waste. It is estimated that construction waste composes 30% of the waste going into landfills. If construction waste was recycled at only 50%, that could significantly reduce the need for new or expanding landfills in Michigan.

Supporting green building in Michigan will result in more environmentally and resource efficient buildings, but they will be healthier buildings for residents and be more energy efficient, saving money.

Green Building Growth in Michigan

