

# The Pyramid of Conservation Is a Monumental Tool

*Brilliant ideas often have humble beginnings.*

The Pyramid of Conservation, developed by Minnesota Power to help residential customers prioritize energy-efficiency improvements in their homes, is a great example. It started as a napkin drawing and rapidly evolved into a highly acclaimed, interactive tool that is having a real impact across the country and spurring chatter in the blogosphere.

Bob McLean, chief operating officer of the Hunt Utilities Group, first scratched out the concept on a napkin during a Region Five Development Commission gathering in Central Minnesota in 2008. He and Dean Talbott, former residential program specialist for Minnesota Power, were talking about ways to engage people and communities in meaningful energy conservation.

"Minnesota Power was getting a lot of inquiries from customers looking to improve the energy performance of their homes, and a high percentage of them wanted information about solar, wind, and other renewable energy options," Talbott said. "While those technologies work well for homeowners in some applications, often there are more cost-effective ways to save energy and lower household heating bills that should be considered first."

"If people would begin by tackling the broad base of easy energy-efficiency measures that cost little or nothing, it would have a huge cumulative impact," McLean said. "Then they could work up to actions that require more skill, technical complexity, and money."

Talbott shared the rough concept with other members of Minnesota Power's Conservation Improvement Program team. They were quick to recognize its potential value and, much to the delight of Bob McLean, worked with the company's information technology resources to develop it.

The resulting Pyramid of Conservation is built on a foundation of understanding. The first step to making real, meaningful energy-efficiency improvements in your home is to understand how your home is using energy. Then it arranges common home conservation measures by cost and

complexity. Those near the bottom, such as controlling thermostats and replacing light bulbs, cost very little and are easy to implement. Moving up the pyramid, items get more expensive and complex. For example, home-generated solar energy and wind power are way at the top.

"This is truly an example where a picture is worth a thousand words," said Tina Koecher, Manager—Billing & Energy Efficiency, Minnesota Power. "Gadgets are great and certainly have a place, but keeping things simple and easy to understand is really key to teaching customers and helping them take steps toward energy efficiency."

While each home is different and not all improvements make sense in every situation, it is a useful guide for those questioning where to apply their time, energy and money for the greatest, long-term energy-efficiency impact. Conservation becomes more of a personal decision, a fundamental principle of Minnesota Power's Power of One® conservation programs.

"Technologies at the top are fun, exciting and cutting edge, but there are a lot less expensive, more effective ways to improve home energy performance that should come first," said Terry Webster, who works in public outreach for the Office of Energy Security in the Minnesota Department of Commerce.

That is precisely the message the Pyramid of Conservation reinforces. An interactive version, posted on Minnesota Power's Web site ([www.mnpower.com/powerofonehome](http://www.mnpower.com/powerofonehome)), offers layers of information within each of the pyramid's 10 levels.

"Minnesota Power did a phenomenal job of taking a general concept, adding meat and bone to it, and making it interactive," McLean said. "Anywhere you click on the pyramid takes you behind the scenes to more information. It is very easy for a lay person to find an entry point and keep delving deeper and deeper for a fuller understanding."

*"The Pyramid of Conservation really is encouraging and empowering people to take tangible steps and get going on home energy efficiency. That is what makes it so compelling."* - Bob McLean

# Pyramid of Conservation is built on a foundation of understanding.

*"This energy pyramid targets specific areas you can tackle based on cost and complexity, helping you prioritize. It identifies precise actions, areas of the home, and appliances to target and classifies them into 10 categories with the easiest and least expensive on the bottom of the pyramid. Start at the bottom and work your way up."*

**Energy Pyramids: Useful Concepts, Not Pyramid Schemes,** posted by John Lippert, Feb. 8, 2010, U.S. DOE Energy Efficiency and Renewable Energy, Energy Savers Blog, [www.eereblogs.energy.gov](http://www.eereblogs.energy.gov)

*"We recently discovered the Pyramid of Conservation ... Not only is it elegant, but we believe it's one of the best visualizations of the home energy to-do list we've seen."*

**The Pyramid of Conservation: A Wonder of the Energy Efficiency World,** posted Feb. 10, 2010, [www.energycircle.com](http://www.energycircle.com)

*"Sometimes all it takes is a pyramid to put things into perspective ... Like other hierarchical pyramid charts—and by other I mean the only one I can think of off the top of my head, the food pyramid—the most important stuff is down at the bottom, the foundation, and things get increasingly less essential toward the top."*

**Pyramid Scheme,** posted by Matt Hickman, March 10, 2010, [www.mnn.com](http://www.mnn.com) (Mother Nature Network)

*"The rules displayed in the energy conservation pyramid are not set in stone; every house is different, and different climates dictate different strategies. But it's hard to quibble with the pyramid's basic hierarchy."*

**Musings of an Energy Nerd: The Energy-Efficiency Pyramid,** posted by Martin Holladay, March 5, 2010, [www.greenbuildingadvisor.com](http://www.greenbuildingadvisor.com)

*It is a useful guide for those questioning where to apply their time, energy and money for the greatest, long-term energy-efficiency impact.*

The Pyramid of Conservation's simple, straightforward and intuitive nature has not only been helpful in educating customers, it has been well received by legislators, regulators, and on numerous energy-related websites and blogs.

Minnesota Power also has received requests for permission to publish the pyramid in student energy guides, homeowner resource packets, and a variety of other publications and websites.

"This is great feedback and further affirmation on the strength of Minnesota Power's Power of One® strategy to provide our customers with the information

and processes they need to make energy efficiency realistic and attainable," said Brad Oachs, chief operating officer, Minnesota Power.

What McLean finds so remarkable is that an idea scribbled on a napkin has evolved into a powerful tool that is fostering action.

"The Pyramid of Conservation really is encouraging and empowering people to take tangible steps and get going on home energy efficiency," McLean said. "That is what makes it so compelling."

## The Pyramid of CONSERVATION residential version

"A Foundation in Energy Efficiency"

