

Using BuildingAdvice to Quantify Energy Costs & Savings

# Monsen Engineering Case Study

by the Building Advisor™



**Customer profile:**  
**Marina Mechanical**  
Founded: 1948  
Headquarters: Fairfield, NJ  
President: Eric Monsen  
No. of Employees: 100+  
Website: [www.monsen.com](http://www.monsen.com)

## Credible financial figures are key to winning projects

Monsen Engineering, a leading facility planning and integrated facility management company located in Fairfield, NJ, made an important realization a while back that has transformed their business. They discovered that building owners and managers typically view mechanical contractors as a cost center, rather than seeing the value they provide in terms of operating cost savings. Monsen Engineering realized that by leading with a discussion about energy savings, customers and prospects were more inclined to listen.

To persuade current and potential clients to view them as a money saver rather than a cost center, Monsen Engineering is now heavily engaged in providing energy

assessments, or technical energy reviews, to show how much their clients can save in energy. Monsen uses BuildingAdvice, an energy assessment program from AirAdvice, to understand how buildings use energy, to quantify the costs involved with the different building systems, and to estimate the energy savings from proposed energy conservation measures. Typically followed by equipment and service projects that help companies control and manage their energy usage, the assessments position Monsen as an indispensable partner that provides measurable cost savings for their clients.

With both new construction and typical capital projects down sharply, the business driven by energy assessments could not come at a better time. An energy offering provides the basis for a strong service business because there is a clear connection between the work done and saving money. Further, leading with an energy service often results in project work for other departments like retrofits and automation. The key is to focus on how mechanical service reduces energy costs. Proving this is where BuildingAdvice has been an invaluable tool for Monsen Engineering.

Providing further support for energy services are the programs being funded by utilities around the country that often include rebates for energy efficiency studies, such as New Jersey's SmartStart Buildings program. Most building managers have a vague idea that rebates are available from some utilities, but they usually don't realize the extent of the services and equipment covered by many of these programs.

For Monsen Engineering, the typical process for an energy efficiency improvement project begins with a technical energy review. The study involves a physical walkthrough of the building and an automated energy assessment using BuildingAdvice. With the data uncovered by the assessment, Monsen can recommend energy conservation measures. The BuildingAdvice report breaks out the estimated energy savings from each energy conservation measure. This drives action by highlighting the cost savings that will result from the work.

For nearly a year now, Monsen Engineering has been grabbing the attention of clients and prospects by explaining to them how they can save money through improvements in energy efficiency. “Leading with a discussion about energy costs and potential savings is getting their attention,” says Jeff Somers, Vice President and Chief Operating Officer for Monsen Engineering. “Who wants to hear a laundry list of services we can provide when we can start by telling them how much money we can save them?”

Recently, Monsen Engineering completed a comprehensive energy review followed by a number of upgrades for a major property development firm. The project was led by James Dunham, Monsen’s Director of Building Automation and by Anthony Occhino, Automation Account Executive. The client has a 2-story office building of about 52,000 sq. ft in Livingston, NJ. The mechanical systems involved in this energy review were two roof top air handling units, 89 heat pumps, 41 moduboxes, and 4-6 zones of lighting.

The client had been taking steps to become more energy efficient, and to earn the Energy Star label for the building. They realized that such a designation would not only lower the building’s operating costs, but it would help increase desirability of space for rent in the building. But they still felt that they were spending too much on energy.

Monsen’s energy review confirmed this. In their initial observations and from discussions with building management, Monsen Engineering discovered numerous issues, including one obvious problem – there were 88 heat pumps controlled by 88 different people. What was not obvious, however, was just how much this was costing them in wasted energy. “The BuildingAdvice assessment enabled us to quantify the problem and provide numbers to the client that they could believe,” says Somers.

The result of the energy assessment was a proposal for a building control job valued at \$200k that would reduce the client’s utility costs by \$50,000 per year. Some of the recommended energy conservation measures included building automation and control, outside air and economizer control, lighting control, and electrical demand limiting and metering. The building automation system (BAS) would provide the facility’s occupants with a comfortable, precisely-controlled environment, while the operator would gain a tool for monitoring and controlling the facility, with instant access to critical performance information.

“Even though HVAC often accounts for 60% of a building’s energy costs, most building managers think primarily of lighting when it comes to energy efficiency,” says Jeff Somers. “Using BuildingAdvice, we help them to realize just how much money they spend on energy, and how much of that is HVAC related.”

For more information about Monsen Engineering, visit [www.monsen.com](http://www.monsen.com).

## About AirAdvice and BuildingAdvice™

AirAdvice is a Portland, OR company that is an acknowledged leader in developing cutting edge technology and programs for improving buildings' energy efficiency and performance. The BuildingAdvice™ energy services program enables commercial HVAC professionals, energy consultants, and engineers to use automated benchmarks, assessments, and audits to deliver cost savings and greener buildings for their clients through energy efficiency.

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