



ENERGY MANAGEMENT SERVICES

# Energy Expert™

Document energy savings. Ensure savings continue.



To stay on top of your energy use and understand what is happening day by day, we offer Energy Expert™. Developed in cooperation with the U.S. Department of Energy, Energy Expert documents actual savings delivered from energy projects and continuously monitors your building's performance to ensure savings are persistent over time. This sophisticated, yet easy-to-understand software application creates a baseline of how your building consumes energy and uses an expert systems analysis to compare actual performance against expected every hour of every day.

It puts your energy use in perspective. How does today compare to yesterday? The last 30 days? The last 12 months? And what potential problems lie ahead? Armed with this information, we will constantly monitor your building and identify areas for improvement, as well as react to alerts that your building's energy usage is out of range and help avoid high peak demand charges.

## Benefits of Energy Expert™

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### **Continuous monitoring of your buildings' energy performance**

24 x 7 analysis of whole building energy use patterns, automatically adjusted for outside weather normal daily variation, ensures that your building operates at peak performance

### **Prove the value of your investment in energy efficiency**

Document the savings that are actually delivered. A great tool for verifying the the impact of energy initiatives.

### **Know about problems immediately**

If your expected energy use exceeds a given threshold, you will be alerted. It is like having a full time energy engineer in your building for a fraction of the price.

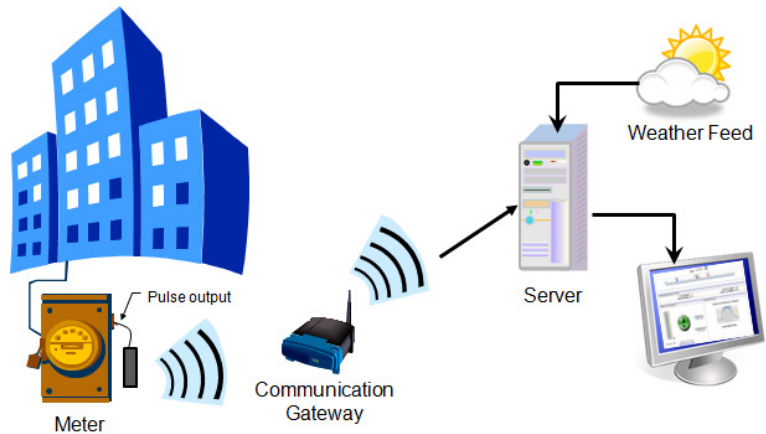
HVAC system performance can degrade over time, **costing you up to 30%** more each month.

Buildings that are not properly controlled can easily **waste \$1 to \$2 per sq. ft.** in energy costs

Documenting savings that result from energy projects can **help justify additional projects**

## Getting Started

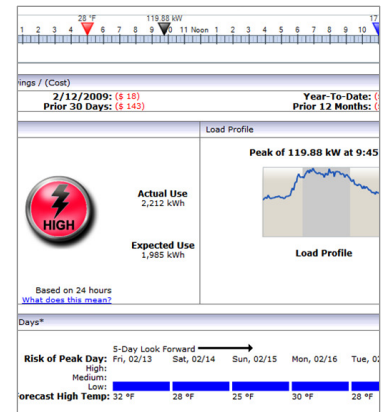
We'll install wireless pulse counters on the gas and electric meters of your building. They transmit real-time energy use information to a communication gateway, also located in your building. The gateway automatically sends the data via a cellular phone call to our server, where our analysis and reporting system takes over. All the data is immediately accessible through a private login from our website. It's that simple.



## Ongoing Protection

We will set up alerts in the system so we will always know how your building is using energy. If you go over your expected usage we'll let you know.

This will protect you against energy waste that often occurs if system performance degrades over time.



## Contact Us

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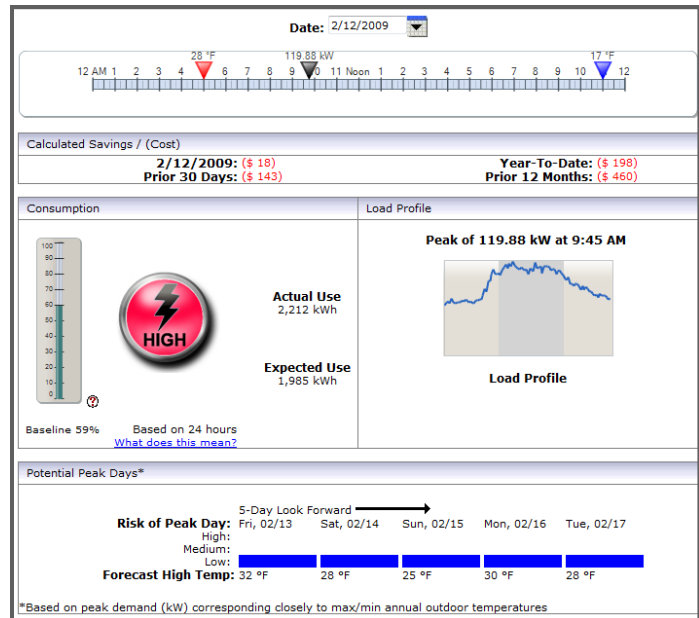
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How would you like to have your own "Energy Expert on staff? This expert is always working, constantly looking at the energy use of your facility and telling you when you are saving money (or wasting it!). Now you can finally have an effective way to keep tabs on this large operational expense within your facility.

Facility managers often make changes to their operations and equipment in anticipation of realizing energy savings. Typically, these investments are made based on having an attractive financial return for the building owner...so far, so good. Where it gets tricky is in actually measuring the savings. Was it hotter than normal last month? May be colder? Weather and other factors make it extremely difficult to "sift out" the energy savings that should have been realized? Here is where the Energy Expert can help. It tells you on a daily bases if your changes are having a measurable, positive impact on the overall building energy cost. It even takes hourly weather, day-type and time of day into account in its energy predictions.

The Energy Expert tool was developed in close cooperation with the U.S. Department of Energy's Federal Energy Management Program with the goal of helping save energy in commercial buildings. This sophisticated, yet easy-to-use software application creates a "smart model" of how your building should consume energy and compares daily performance against it.



With Energy expert you'll get:

Daily Scorecards to concisely show your energy use, cost savings, load profile and a five-day weather forecast with a risk of peak days and highlighted.

Daily interactive and month-at-a-glance load profile charts so you can spot trends and problems.

Email notifications when your energy use falls outside expected levels.

Access to the results anywhere you have an internet connection.



**Q: How is Energy Expert better than competing products/services?**

A: We don't believe there are any competitors. Energy Expert is unique in many ways. Facility managers for years have been able to track and make guesses on how to save energy based on past performances. Typically, energy managers have to wait until they get their utility bills to determine how well the building is performing. Energy Expert gives you next day results that are easy to understand. This is new. Energy Expert does all of the tracking for you and makes estimates for expected energy use that incorporate more than just past performance, but also weather conditions for that day. The impact of weather on energy use is immense and it has been one variable that was not fully integrated with interval data, until Energy Expert.

**Q: How long does it take to install and begin using Energy Expert?**

A: Installation requires a pulse output from your electric meter or the installation of a pulse output meter (which we can provide). This is typically the most difficult aspect of installing the Energy Expert. Once you have a pulse output, it is easy to install our wireless monitoring device which immediately begins transmitting your energy use information to our network operations center. You can start viewing your electric data online within hours. The Energy Expert can be set up to start learning about your building from that point forward or you can "pre-train" your Expert by providing us with historical 15-minute electric data for your building.

**Q: What are the technical requirements for Energy Expert?**

A: If your computer has Internet access then you're half-way there. The only other thing you need is the ability to provide the Energy Expert with 15-minute meter data. To make that simple, we've developed a small, easy-to-install wireless monitoring device that uses the cellular network to transmit your meter information to our servers. Once that is installed, we'll consult with you to configure your Energy Expert to define the baseline period, how you want your notifications set up, etc.

**Q: Can I export my data from Energy Expert?**

A: All data that are provided to you through Energy Expert can be exported to other programs such as Excel or Word. This allows you to format and store the information how and where you like.

**Q: How many people can have access to the Energy Expert?**

A: It is up to your discretion how many individuals can have access to your Energy Expert Profile. Each individual must provide a login and password to access the appropriate account, ensuring confidentiality. Reports can either be accessed through the profile's main page or sent directly to emails, which you can designate and manage in the software.

**Q: Will I have access to technical support should I have any problems using the tool?**

A: You bet, we'll provide you with three different ways to contact us—phone, email, and online chat.



**Q: How much does Energy Expert cost?**

A: Sorry, it depends on a few factors. Give us a call, we will ask you a few questions, and then we can give you a price. Call us at 877-743-4232, or fill in the online form at Request Information and we'll get back to you right away.

**Q: What are the terms of service for using Energy Expert?**

A: Energy Expert requires an annual subscription.

**Q: What utilities does Energy Expert track?**

A: Energy Expert most effectively tracks electrical energy use for your building. We're adding the capability to track other energy streams in the near future.

**Q: What types of data does Energy Expert track and use for modeling?**

A: Energy Expert can use a wide range of input data which drives energy use in your building. Examples include: Outdoor temperature, humidity/wet-bulb, sub-metered loads, occupancy, etc.

**Q: How does Energy Expert receive all the necessary data?**

A: Energy Expert receives automated data streams directly from your buildings' meters and sensors.

**Q: Does Energy Expert require extra work from an energy manager like myself?**

A: No! Energy Expert will track your buildings' energy use for you, as well as create reports and charts for your visual analysis. The data are recorded at 15-minute intervals and daily reports are sent to you the next morning.

**Q: Do I need to import historical meter data to use the system?**

A: No, however historical data can be imported to have Energy Expert run most efficiently.

**Q: If so, how do I do this?**

A: This can easily be done by providing us with 15-minute interval meter data from your BMS or utility in csv file format. We can then import this information into the Energy Expert and you'll be up and running in no time.

**Q: Is my data backed up?**

A: All data that you provide, as well as additional data that we collect via our wireless monitors, are backed up on multiple servers. These data are referred to for forecasting future estimates of energy use. Energy Expert, in essence, comes to know your building inside and out, just as if it had been managing your buildings' energy use for years.

**Q: How does reporting work?**

A: The reports provided to account users are accessible on the Energy Expert server through any available Internet connection. Each user must provide a login and password to access the appropriate account, ensuring confidentiality. Reports are either accessed through the profile, or they can be sent directly to individuals' emails.