

# CAREERS IN ENERGY

**Energy  
Manager**

One area of the energy industry in which there is sure to be growth is in the field of Energy Management, where engineers and other professionals work with facilities to increase energy efficiency. Wayne Chase is a Certified Energy Manager who works for Chevron Energy Solutions in their Syracuse, NY office. We had a chance to catch up with Wayne recently and talk to him about his work and what the future holds for this particular career option.

**Energy Smarts:** Tell us what you do.

**Wayne Chase:** I'm a Regional Accounts Manager for Chevron Energy Solutions. I'm responsible for the monitoring and verifying of energy performance contracts all over the northeast. (In energy



Wayne Chase conducting an audit.

performance contracting, an engineering company makes improvements to the customer's facility to save energy and then provides a guarantee that a certain amount of savings will be realized.)

**ES:** So, I understand that your work is usually referred to

as energy monitoring. What does that mean?

**WC:** That means we have customers that have contracted with us to lower their energy use. We change out their lighting so they have lights that use less electricity, put in new HVAC [heating ventilation and air conditioning] systems, and install other things like windows and insulation. We're also doing a lot of water conservation these days.

**ES:** Why is your client concerned about how much energy they use after you do the work?

**WC:** Our clients pay a lot of money for their electricity, natural gas, and water, and their utility budgets tend to be a large part of their expenditures. Their highest budget item is usually salaries for the people who work

in the building. Often, the second or third highest is their energy and water use. So, if we help them reduce these large dollar amounts, even if we reduce it a little bit percentage-wise, it's still a percentage of a very large number, so they end up saving quite a few dollars at the end of the year.

**ES:** Do you ever have to go visit these clients and see how they are using energy? If so, what are you looking for?

**WC:** Yes, we're looking to make sure that the equipment we installed is working properly and doing what it's supposed to do: Save them energy or water. We're also looking at how the people in the building are operating the equipment. We check to make sure it's being used the same way we predicted, because we told our client how much energy savings they would have.

**ES:** When you are looking at a building's energy use, do you use any kind of special equipment?

**WC:** I'll often bring metering equipment - devices that will measure how much energy the lights are using, or water meters that measure the flow of water through faucets or toilets.

**ES:** How do these meters work? Is there any kind of interface that allows you to use this information on a computer?

**WC:** The electric meter I use is handheld, and has the ability to measure electricity use. I use it mainly for lights and motors where we measure how much energy they draw in watts and kilowatts, and then we'll have other devices that measures their run-time. Using those two parameters we can determine how much electricity they will use over a year. I can then graph the data so that I get a picture of how that equipment is really being used.



**ES:** What kind of schooling did you need to have in order to do this job? Do you have any special degrees or certifications?

**WC:** Yes, I have an electrical engineering degree, and it is recommended that all of our staff have an engineering degree. Most of them are also "Professional Engineers", meaning that they have passed their state license exams. After that we have several certification programs you can take through the Association of Energy Engineers and also other state programs. You want to keep your training up to date and also want to be able to show people that you have a certain level of knowledge about the things you're working on.



Chase performing computer calculations.

**ES:** When you were growing up, what kinds of things did you like to do?

**WC:** I was pretty good at science and math. My favorite things were always the hands-on science things like Earth Science, Biology, Physics; things where you got to do the experiments and see the results and play with really neat equipment. That was what I liked the most. Math came pretty easily to me, and I really liked computers. I've used computers since I was a little kid; programming them, playing games. I'm still a computer nut - I build computers for fun.

**ES:** How did you get interested in energy?

**WC:** At the end of college, I worked for the utility company - Niagara Mohawk. They were running some of these energy conservation programs for their customers. I worked with people who were running the programs, so they got me involved with that side of their customer service, and it was fun. There was always something new and different coming out. It felt good to help customers save money, so they were happy, and at the same time it was good for the environment - saving energy is always good for the environment because it means we're reducing the number of power plants we need to run to keep everyone's electricity flowing.

**ES:** If you were going to give advice to someone who wanted to follow a career path such as yours, what would it be?

**WC:** My advice is to get good grades in high school and go to the college of your choice. You don't have to necessarily go to an engineering school to do all of what I do, but if you did, you'd have more opportunity to do not only my job, but several other jobs in the industry I work in.

**ES:** Is there anything else you'd like to add?

**WC:** I really feel good about what I do because of the advantages it has for our customers. The client saves money and they also get new equipment. That 's the other nice thing that goes along with my job. We have to put in new equipment, and everybody likes getting new lights, a new heating system, or a new air conditioning system. So customers are very happy to work with you. And at the same time I feel really good that I'm doing something that they like, that saves the environment and has that kind of beneficial impact on the rest of the world.

**ES:** Thanks Wayne, I appreciate your taking time to talk with us.

