

CAREERS IN ENERGY **Energy Automation Consultant**

Marc Romanczyk is an Energy Consultant with Energy Automation, Inc. in Syracuse, NY. Energy Automation, Inc. is an energy cost-control consulting firm that has been in business for over 23 years. It's a full-service energy service company with the mission statement to *"Understand a client's unique energy needs from every perspective and team with them to implement actions that return the greatest value."* Their impressive list of clients includes the Syracuse City School District and Onondaga County. Marc volunteers his time and expertise by serving on advisory councils for local and state organizations, and enjoys golfing whenever he can find the time.

How do you assist schools and school districts in managing their energy costs?

We assist the district in establishing an "Energy Initiative," which offers a specific target list of energy concerns and needs with respect to commodity and operational costs.



Marc Romanczyk reviewing data for a client.

Specifically, we provide the following professional services: utility bill auditing; comprehensive energy auditing of school buildings; design of cost effective Energy Conservation Measures (ECM's); measurement of energy consumption and savings after ECM's are installed; management of energy commodity – gas, oil and electricity – purchasing; creation of regular Energy Budget reports; and training of district employees.

Does weather analysis play a role in the work you do for schools, and if so, how?

Yes, weather analysis plays a very important role when it comes to managing effective energy cost controls. It is important to remember that as weather changes, so must the energy conservation strategies that are built into the school building's automated mechanical load controls. Another real "eye opener" comes when you analyze the energy costs during *occupied* hours versus *unoccupied* hours.

How do automated energy management systems serve the needs of the human beings who use the school buildings in which you install them?

First, it's critical to understand that there is a world of difference between an automated temperature control system, and a true automated "energy management control" system (EMCS). Many facilities have good automated "temperature controls," but these same facilities can reap tremendous energy conservation benefits when they operate under true "energy management controls."

For the school's occupants, the EMCS provides proper heating, cooling, lighting and more, no matter what the weather conditions or time of day. And a true EMCS provides benefits over and above the monetary results that add more school budget dollars that can be used to meet the school's mission, rather than going to the local Utility.

So, yes, an automated energy management control system (EMCS) serves the needs of the people in the school building, but it also helps people far beyond, too! The positive environmental impacts of energy conservation are very important to our society and the world as a whole.

As an example, we recently did an analysis and produced an energy conservation poster for a local middle school. We calculated that if the students and staff just turned off all of their computers at the end of each day, the school would reduce annual air pollution by 14,256 lbs of carbon dioxide, 1,892 lbs of sulfur dioxide and 946 lbs of nitrous oxide. That's like planting 250 new trees a year — everyone can get on board with that kind of energy management!

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Do you see global climate change as being a factor in your work, short-term and/or long term?

Yes, we do. As I just said, we are conscious of our responsibility and impact on the environment with the strategies we develop for using energy efficiently. Our concerns regarding the debate on global climate change inspired us to formulate and document Environmental Impact Statements that we provide to our clients along with cost-savings figures. It is nothing less than remarkable to see how clients can take that Environmental Impact Statement and then really get involved in energy conservation.



We sincerely believe that it is part of our charter to educate the public on their influence on the global environment, and our individual responsibility to take our conservation actions seriously.

In what ways do you find your work most rewarding?

That's simple. We all enjoy and take pride in helping our clients conserve energy and do our part as responsible stewards of the environment. Saving money for our clients and protecting our planet's limited resources is our focus, and our commitment.

What aspects of your job are most challenging?

I'd have to say the most challenging part of the job is staying current with all of the technological changes with mechanical equipment. We are fortunate to have many trade allies that we work with and we rely on their engineering and product expertise to keep us up to date and informed.

How did you get into this line of work? What education and other job experiences let to your current position?

I started my career out of college with General Electric, in their Lighting Business Group. I was trained on efficient lighting system design and innovative ways to reduce energy use while providing for human needs. That first job allowed me the opportunity to work with customers that ranged from schools and hospitals to the largest industrial manufacturers in New York State. So, I had to get proficient in energy conservation from the first day of my first real job.

I also recently worked for the Royal Dutch Shell Group in Atlanta before coming to Energy Automation, Inc. I was fortunate to get some of the best training available for energy commodity purchasing and hedging. All in all, the job training for these two corporations provided the technical education that I utilize today.

Do you have any advice for students who are considering a career in energy like yours?

Yes, I do. The president of Energy Automation, Inc., Mr. James T. Gladziszewski, has worked with the School of Engineering at Syracuse University to establish a curriculum in Energy Systems. In fact, we have a Syracuse University engineering student working with us as an intern this year, Brian Willette, who has a major in mechanical engineering and a minor in Energy Systems. It is a great experience for all of us to work together. Many other universities also offer courses in Energy Conservation and Engineering, allowing young students today to pursue a rewarding career in the Energy Market disciplines.

