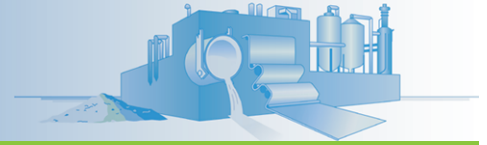


Industrial Assessment Centers Alumni Case Study



Larry Luskay, Oregon State University

IAC Roots

Larry Luskay began his professional career in the early 1980s with a focus on energy conservation. At the time, he held a bachelor's degree in mechanical engineering and worked for a small engineering firm in Corvallis, Oregon, home of Oregon State University. Mr. Luskay especially enjoyed performing commercial energy audits and all the associated fieldwork. As the job and economic climate began to wane in the late 1980s, Mr. Luskay ventured to Oregon State University and met with Dr. Greg Wheeler, director of the Oregon State Industrial Assessment Center (IAC). Mr. Luskay reports that "the prospect of doing hands-on energy conservation work in the industrial sector was so intriguing that I was willing to endure more years of school just to work in the program." He was able to get a research assistantship, which paid for his tuition, and graduated from Oregon State in 1991 with a master's degree in mechanical engineering. During his three and a half years at the Oregon State IAC, Mr. Luskay was involved in more than 100 industrial assessments and served as a mentor to undergraduate students in Oregon State's IAC program.

One of Mr. Luskay's memorable experiences from the IAC program was an industrial assessment for a potato chip facility. His IAC team noted that the process for washing mud and stones from the potatoes used 350 gallons per minute of clean city water and that washing the sliced potatoes utilized an additional 400 gallons per minute of clean city water. The facility was recovering starch from the sliced potato wash process and discharging this water stream to the sewer. The water from the mud/de-stoning wash also went straight down the sewer. The IAC team recommended that the facility install higher-efficiency starch recovery cyclones and use the starchy gray water rather than clean city water in the mud/de-stoning wash. Not only did these measures significantly reduce the company's water and sewer charges, but they also produced increased revenue from the sale of the extra food-grade starch recovered from the water stream. In fact, senior managers were so impressed with the net savings and the revenue enhancement of over \$100,000 per year that they planned on replicating these measures at all of their chip manufacturing plants. Mr. Luskay noted: "This is the level of thinking that the IAC always brought to the table in every assessment. It was especially satisfying, since the facility engineers had never thought about using recycled gray water."

Pride in identifying possibilities for resource and energy savings that other seasoned, on-site company engineers missed was a great motivator for Mr. Luskay as he developed his technical skills through the IAC program. He spoke about the IAC's value in getting him out of the classroom and allowing him to apply his academic knowledge in small and medium-size manufacturing plants. The practical aspects of the IAC curriculum also gave him some basic job skills that went beyond technical problem-solving. These skills have been critical throughout his career. "The IAC experience gave me the confidence to tackle large projects, the ability to communicate effectively with facility operators in order to understand how their systems operate, and the ability to communicate my recommendations effectively in writing," Mr. Luskay says. "Having to write 30-plus reports per year really honed my ability to convey technical material in a clear and concise manner."



Larry Luskay, Oregon State IAC alumnus, measures air flow rate during the commissioning of an under-floor air distribution system.



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Although confidence and communication skills are key to a successful career in engineering, Mr. Luskay credits another IAC emphasis as giving him the competitive edge that differentiates him as a problem-solver. He says: “The greatest advantage that participating in the IAC provides a student is the ability to look at a problem on a system level. Since every assessment typically starts out with a brief tour of the plant, we get to see the entire process — from raw material to finished product — and understand how all the individual components must work together in order to achieve the desired end result.” It is this systems approach to identifying opportunities for energy savings that has proved invaluable to Mr. Luskay’s career.

Career Highlights

Since graduating from Oregon State, Mr. Luskay has worked for several engineering firms and even ran his own consulting engineering firm specializing in resource conservation. He is currently employed at Portland Energy Conservation, Inc. (PECI), a nonprofit organization that advocates the wise use of resources. PECI is a leader in an industry-wide movement dedicated to making a practice called “building commissioning” the accepted norm. Building commissioning is a quality assurance process that ensures that buildings and their energy systems are designed, constructed, integrated, and operated as intended to maximize comfort and optimize energy usage. In his role as a pioneer in the building commissioning movement, Mr. Luskay draws upon his IAC experience. “The IAC experience has been invaluable in not only teaching me how to look at systems as a whole and understand how they integrate with each other, but providing the solid foundation for optimizing system operations.” PECI’s work on building commissioning projects requires a significant amount of in-building work, but Mr. Luskay also conducts research and educational workshops. In this area too, he feels that his experience through the IAC in effective communications and technical writing have been a great assets in his roles as a researcher and trainer.

Many employers in the energy services industry have realized the benefits of hiring IAC graduates, and PECI is no exception. In fact, Mr. Luskay’s skills and experience gained from the IAC influenced his associate director, Tudi Haasl, to hire an additional IAC alumnus at PECI. According to Ms. Haasl, “Mr. Luskay is an exemplary employee, skilled engineer, and excellent writer and presenter — all things that PECI requires of its technical staff. Based on our experience with Mr. Luskay, we would always carefully consider any job candidate who graduated from the IAC program.”

Focused on the Future

Even though he still enjoys performing in-building engineering work — the same “bug” that enticed him to return to school for his master’s degree over 15 years ago — Mr. Luskay finds himself more and more involved in training others. He believes that spreading the word to building owners, facility operators, and fellow engineers about the benefits and techniques of building commissioning is an ideal way to leverage his knowledge and have a broader impact on energy savings. “Once you learn how to perform a task effectively, the best way to raise the bar is to help educate others. I always quip that it seems like I’m trying to educate myself out of a job, but there is always something new to learn and pass on to others.”

Mr. Luskay is a member of the American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE), and has been both a contributing and a primary engineer on two ASHRAE research projects. He is also a registered Professional Engineer in the state of Oregon.

For Additional Information, Please Contact:

Portland Energy Conservation Inc.

www.peci.org

Industrial Assessment Centers Student Forum Website

www.iacforum.org

EERE Information Center

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