

Energy Savings Goes Right to the Bottom Line

By John Rees, PE

As gas and utility prices rise, energy savings can make the difference between profit and loss. The IES energy program has a proven track record of sending dollars to the bottom line of North Carolina companies. For example:

- Carolina CAT of Charlotte anticipates annual savings of \$115,000 through energy reductions in lighting and HVAC. These measures will achieve a payback of less than one year, far superior to the typical two year payback required by most companies.
- MJ Soffe, a Fayetteville clothing manufacturer, has saved more than \$165,000 annually through wastewater heat recovery, and through steam, air and lighting system improvements.
- NC Art Museum now operates a reliable, energy efficient HVAC system with minimum fluctuations in temperature and humidity. In 2006, they saved \$480,000 and reduced their energy consumption by 58 percent.

While these are some of the more notable examples, in 100 surveys over the past 18 months, the recommended annual energy savings have averaged \$26,770 at a cost of \$33,420. That is a simple payback of just 1.25 years.

Savings for All

We have achieved savings in textiles, rubber, abrasives, glass and plastics manufacturing, as well as state office buildings, schools and universities.

The typical sequence begins with a preliminary energy diagnostic survey. This survey consists of a general walk-through of your facility and interviews with operations, maintenance, and management personnel about energy use and areas they have identified for potential savings. In this survey we will identify your major energy users and some specific actions you can take to reduce energy demand. Actions may be as simple as changes in lighting type or elimination of free discharge compressed air use.

As a result of the preliminary survey, we may recommend one or more targeted surveys in lighting, HVAC, boilers, air compressors, chillers/cooling towers, preventive maintenance, lighting, energy efficient motors, and advanced energy topics.

Workshops

While energy surveys will identify significant dollar savings at your facility, training of your employees in energy topics will ensure that measures are consistently applied. This training will enable them to identify energy savings in the future.

We offer a [broad range of energy training opportunities](#) starting with one day workshops in specific topics such as lighting, HVAC, boilers, air compressors, chillers/cooling towers,

preventive maintenance, lighting, energy efficient motors, and advanced energy topics. Two three week diploma series offer in depth education in energy and facilities management topics. Our Energy Management (EM) Diploma Series focuses on energy topics while our Facilities Engineering Management (FEM) Diploma Series covers energy topics plus general facilities management topics.

Since its inception in 1988, the IES energy program has trained more than 11,885 people in 530 workshops and has provided more than 855 surveys with recommendations exceeding \$388 million to industry, business and government in North Carolina. During 2005-2006, the energy group trained more than 947 professionals in 41 workshops and conducted 50 energy systems assessments.

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