



In 2011, The Division of Air Quality (DAQ) embarked on an initiative to work with facilities outside of the regulatory framework by encouraging them to take part in a voluntary statewide program to reduce energy use.

This initiative was funded through a grant provided by the EPA over a period of 4 years (2011-2015). The aim of the project was to help North Carolina facilities increase their operational efficiency while reducing both energy costs and air pollution.

On May 14, 2015, DAQ recognized three companies for implementing the most energy efficiency recommendations as well as our partners for their expertise and experience in helping DAQ achieve the goals of this project. The Deputy Director of DAQ, Mr. Mike Abraczinskas presented the awards to the recipients at the 2015 [Environmental Stewardship Initiative](#) meeting which was held in Raleigh, NC. Also present at the ceremony were DAQ team members; Sushma Masemore, Robin Barrows and Adey Olatosi.

**COMPANIES:**

**Bernhardt Furniture Company: Plants 3 and 5, Lenoir NC**

Bernhardt Furniture, designs and manufactures house furniture and is very committed to implementing energy efficiency measures at their plants. Plants 3 and 5 achieved a rare feat: a 100 % implementation rate. This means they implemented all the recommended energy efficiency measures resulting in a more efficient boiler and steam system to name just one improvement. Bernhardt Furniture also graciously hosted the hands-on wood fired boiler workshop at their facility in 2013, partnering with Dr. Eckerlin. Both facilities at Bernhardt were able to save 15,000 MMBtu of fuel. Eddie Pitts received the award for Bernhardt Furniture Industries.



**Alliance One International, Wilson NC**

Alliance One International is a leading independent leaf tobacco merchant serving the world's largest cigarette manufacturers. Four of their facilities participated in the energy assessment program with the Wilson facility implementing the most energy efficiency recommendations. Alliance One was able to reduce the electricity use by 1.8 million Kwh/yr and reduce fuel use by 10,000 MMBtu combined for all 4 facilities. Terry Koonce received the award for Alliance One International.



**Penco Products, Hamilton NC**

Penco Products, a leader in providing storage products and materials handling solutions was able to implement over 70 percent of their energy efficiency recommendations and reduced their electricity use by 1.4 million Kwh/yr. Representatives from Penco Products were unable to make the presentation.

**PARTNERS:**

**Dr. Herb Eckerlin: North Carolina State University- Mechanical and Aerospace Engineering Department**

Dr. Eckerlin is a nationally recognized expert in boiler efficiency and has provided many workshops and seminars on the subject in the US and abroad. While Dr. Eckerlin conducted many energy assessments helping facilities reduce energy use, he also shepherded 2 hands-on wood fired boiler workshops in conjunction with Bernhardt Furniture.



**Dr. Stephen Terry: North Carolina State University- Mechanical and Aerospace Engineering Department**

Dr. Terry heads the Industrial Assessment Centre which visits manufacturing plants in NC, SC and VA, to conduct energy assessments and demonstrate energy conservation techniques. He was instrumental in providing energy efficiency assessments at multiple facilities across the state and works closely with Dr. Eckerlin.



**Waste Reduction Partners (WRP)**

Waste Reduction Partners, a team of highly experienced staff and volunteer retired engineers, architects and scientists, provided North Carolina businesses and institutions with energy assessments and technical assistance. They also provided a workshop and two webinars to further educate company managers about the benefits of energy efficiency options. WRP was represented by Terry Albrecht (State Director of the program) Dick Sloane and Conrad Meyer (Piedmont Technical Manager).



**L-R front row:** Dr. Eckerlin (NCSU), Eddie Pitts(Bernhardt), Sushma Masemore (DAQ), Terry Koonce (Alliance One International), Robin Barrows (DAQ), Adey Olatosi(DAQ), Terry Albrecht (WRP) and Dick Sloane(WRP)

**L-R back row:** Dr. Stephen Terry (NCSU), Mike Abraczinskas (DAQ) and Conrad Meyer (WRP).

**Thank you to all our participating facilities and partners.**