

Programs

As part of Texas A&M University, one of largest research institutions in the Southern United States, the Energy Systems Laboratory (ESL) obtains much of its income through federal, state, and industry grants. ESL specializes in managing energy efficiency-related projects where technical university skills are needed. Some of the largest programs are featured below.

Texas Senate Bill 5 Codes Training, Energy and Emissions Analysis Program:

The Texas Government has assigned ESL the important role, within the Texas Emissions Reduction Plan, of providing technical expertise in the area of calculating and verifying energy savings and air emissions reduction from energy efficiency programs, as well as providing technical assistance on the new statewide building energy code.

Equipment Testing Services:

ESL conducts standard and custom testing of industrial and household fans, air conditioning, ventilation products and heat pumps. The lab also offers testing of flow meters, sound pressure levels, photovoltaic cells, and contaminant detection. The ESL ranks among the best testing and research labs in the nation and continuously seeks to improve its capabilities. The lab prides itself on its unique ability to customize test setups for customers' specific needs.

Continuous Commissioning® Program:

The Energy Systems Laboratory has developed a commissioning process over the last decade called Continuous Commissioning®. This process is used to resolve operating problems, improve comfort, optimize energy use, and sometimes to recommend retrofits. This process has produced average energy savings of about 20% without significant capital investment in over 150 large buildings in which it has been implemented. Payback has virtually always been under three years, with two years or less in most buildings.

eCalc Energy and Emissions Reductions Calculator:

Soon Texans will find it easier to comply with statewide energy efficiency codes created to reduce harmful emissions and improve air quality. Researchers with the TEES Energy Systems Laboratory are developing and testing eCalc, a Web-based system that automates calculations mandated by the state codes. eCalc allows a wide range of building and community facilities to be analyzed for energy and emissions reductions. By entering information about their respective buildings, owners and managers of single-family residences, multifamily buildings and commercial facilities will find out the best things to do to save wattage and reduce energy consumption. Reducing the load on power plants will result in fewer emissions – and cleaner air. A side benefit: utility customers also will save money by using less energy.