



# **ENERGY SPECIALIST TRAINING MANUAL**

**DEVELOPED AND DESIGNED BY THE CENTRAL  
FLORIDA ENERGY EFFICIENCY ALLIANCE  
(CFEEA)**

**AN EDUCATIONAL PARTNERSHIP TRANSFORMING OUR COMMUNITY**





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## INTRODUCTION

In 2009, the United States Department of Energy awarded Orange County Board of County Commissioners with the Energy Efficiency & Conservation Block Grant (EECBG). This inaugural block grant was made possible by the American Recovery & Reinvestment Act (ARRA) of 2009. One of several energy cutting programs made possible by the EECBG was the Central Florida Energy Efficiency Alliance (CFEEA) Kilowatt Crackdown Challenge. The creation of CFEEA helped bring a group of community stakeholders, local governments, academia, non-profits, and local utility providers together in effort to create and promote programs that would help reduce the energy consumption of commercial buildings in the Central Florida region. CFEEA's first program introduced to the public was the Kilowatt Crackdown Challenge. The Kilowatt Crackdown Challenge is a free program for commercial building owners that educates and assists them to use the U.S Environmental Protection Agency's ENERGY STAR Portfolio Manager. Portfolio Manager is an online program that provides the ability to benchmark commercial buildings past and current energy use through internal data collection about the building's use as well as the actual energy use from monthly utility bills. The Kilowatt Crackdown Challenge registers buildings throughout Central Florida to enter the program and gain access to free educational and technical assistance, and qualify for annual community awards.

Through the growth of the Kilowatt Crackdown Challenge program, it became apparent that while many building owners, facility managers, and engineers were convinced of the merits of using ENERGY STAR Portfolio Manager, the time and resources for the data gathering and entry simply were not available. A tough economic environment had forced many companies to reduce staff and handicapped many Facility Managers ability to do any additional work on benchmarking their buildings. In the wake of this observation, the Kilowatt Crackdown Challenge began a goal to provide qualified hands-on technical assistance that could physically go to the businesses and assist them using the ENERGY STAR Portfolio Manager program. With limited funding available, Orange County set out to recruit qualified students from local academia to participate in a program that would not only help local businesses but would also help students gain valuable work experience in the growing field of sustainability. Thus, the Energy Specialist Program was born. Students are hired by Orange County and are then put through rigorous training consisting of a series of training videos and presentations as well as hands on practice with a program instructor. Once the student has completed all necessary training phases they are then prepared to begin assisting participants of the Kilowatt Crackdown.

This manual will be used by the Energy Specialist throughout their training and the entire length of the program. The manual will help the Energy Specialist stay on task, keeping them at an appropriate pace. If you have any questions regarding the manual please contact the Program Instructor, Christina Webb at [Christina.Webb@ocfl.net](mailto:Christina.Webb@ocfl.net) .





## ENERGY SPECIALIST MISSION

It is the mission of the Energy Specialist program to foster job creation in sustainability and energy management while helping businesses, government agencies, academia, and non-profits in Central Florida lower their demand for resources such as energy and water thus improving our environment and local economy. The Energy Specialist program is also a resource for businesses and institutions that have made the commitment to energy efficiency measures and are seeking opportunities to implement energy improvements as well as become case studies and research for the Central Florida commercial market.

## QUALIFYING CANDIDATES

The Energy Specialist position offers valuable experience in the fast growing field of energy efficiency and conservation. This opportunity is open to individuals at least 18 years of age who are currently enrolled in a degree program such as Engineering, Environmental Sciences, Business Administration, Public Administration, Growth Management & Planning, or related disciplines at an accredited college or university or who are recent graduates (within one year of graduation for BS and MS degrees).

There are currently two tracks within the Energy Specialist Training Program. The Energy Specialist Technical Assistance (TA) track is targeted towards engineering students. It is highly desired that these student also be involved with the American Society for Heating, Refrigerating, and Air-Conditioning Engineers (ASHRAE) student chapter for their school or any other extracurricular activities relating to energy efficiency, sustainability and the environment.

The second track of the Energy Specialist Training Program is the Energy Specialist Research & Development (R&D). This track seeks students who have strong writing and verbal skills and a history of interest in the field of energy and sustainability. These students are interviewed through the University of Central Florida Office of Sustainability and then through CFEEA. All majors are qualified to participate in the program commencing approval through the interview process.

Preference is also given to candidates that exhibit documented experience helping others become more energy efficient and improving sustainability for both environmental and economic purposes.

Students must be able to complete the entire 12 week program and pass each Phase Test of the program. Students must commit to attending one lab a week and approximately five to ten hours a week.

The students must have a valid driver's license and their own means of transportation for individual site visits. The students must also be processed through the Orange County Water Action Volunteer (WAV) program. Please refer to the end of the manual to view the WAV application.