

EMERGING TECHNOLOGIES AND ACCELERATED COMMERCIALIZATION PROGRAM (ETAC)

Project Brief: ThinkEco smartAC Controls Window Air Conditioners

Background

Many older commercial buildings, especially in New York City, rely on window air conditioner units for cooling. Because of the decentralized nature of the units, they are often left running through the evening and on weekends during the cooling season. This situation presents an opportunity for significant energy savings if units can be controlled in a coordinated manner to reduce loads during periods when rooms are vacant.

Project Description

ThinkEco will demonstrate its smartAC kit, which makes it possible for facilities managers to centrally control multiple room air conditioners in a building from any computer or smartphone and track energy use. Air conditioners can be automatically turned on and off using room temperature set points and a customized schedule. Furthermore, the smartAC allows for groups of air conditioning units to participate in demand response events on hot days when usage is high and the electricity grid is stressed. The smartAC will be installed on approximately 500 air conditioners at 21 locations (medical, office, university, and school settings) across New York City.

Benefits

Energy savings are expected to come from the temperature control and automated scheduling abilities of the smartAC, by reducing air conditioner usage during periods when it is not needed. Additionally, the smartAC enables participation in demand response programs, which help to improve grid reliability and lower wholesale electricity prices as well as providing payment to the participant.

Investment

NYSERDA	\$71,766
Participant Team	\$47,844
Total	\$119,610

Lead Participant

Think Eco, Inc.
New York, NY

Other Team Members

Yeshiva University
Montefiore Medical Center
New York-Presbyterian Hospital

Technical Consultant

Nexant, Inc

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Project Details

Start Date: September 2014
Project Status: Underway

Last Updated

March 2015

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The ETAC program supports multi-site demonstrations, provides indepth performance validation, and shares results through dedicated outreach.



NYSERDA