Lifeine Assistance, Inc.

DONALD R. & DONNA J. LOWRY CENTER

Case Study

FlexTech Consultant: Taitem Engineering

Client Name: Lifetime Assistance, Inc.

Sector: Nonprofit, Healthcare

Building Size: 85,000 total sq. ft.

Location: Rochester, NY

Annual Savings:

Cost Savings: \$47,025 Electric Savings: 364,509 kWh Gas Savings: 1,131 MMBtu

The Bottom Line

Lifetime Assistance Inc., a nonprofit organization offering services to empower individuals with development disabilities, worked with Taitem Engineering to complete FlexTech energy studies at two of their major facilities. The studies identified opportunities that could collectively **save them \$47,025 on their utility expenses annually**. By implementing the energy efficiency measures recommended by Taitem, Lifetime Assistance can reduce their electricity consumption by **35%**, natural gas consumption by **39%**, and completely pay back the money invested in energy efficiency in **less than 10 years**.

NYSERDA

NEW YORK STATE OF OPPORTUNITY.

Overview

When Lifetime Assistance was looking to reduce energy consumption, minimize energy costs, and improve occupant comfort, they engaged a NYSERDA-approved FlexTech Consultant, Taitem Engineering, to identify opportunities for reducing energy consumption through improved building operations and low-cost building upgrades.

Taitem is a consulting engineering firm with over 15 years of experience completing energy studies through NYSERDA's FlexTech program.

As a FlexTech Consultant, Taitem handles the entire NYSERDA application process, requiring minimum effort by their clients. FlexTech Consultants can help customers set energy performance goals, identify savings opportunities, and then prioritize those opportunities to achieve the greatest benefit. Because they provide customized technical assistance, they work with customers to help them achieve specific, individualized goals based on identified needs.



Measures and Estimated Annual Savings

Measure Description	Electric Savings (kWh)	Gas Savings (MMBtu)	Annual Cost Savings (\$)
Refrigerator Replacements	1,821	-	\$197
Door & Window Upgrades	2,371	63	\$721
Reduced Lighting Power	16,413	_	\$1,810
Lighting Controls	17,967	-	\$2,000
High Efficiency LED Lighting	98,069	-	\$10,577
Equipment Controls	67,274	632	\$12,818
Efficient HVAC & Motors	160,594	436	\$18,922
Total	364,509	1,131	\$47,025

Approach

Taitem completed an initial energy study at Lifetime Assistance's main facility in 2015 through NYSERDA's FlexTech program, which covered 50% of total energy study cost. Based on the useful and actionable results of that study, Lifetime Assistance engaged Taitem to conduct a second FlexTech study in 2017 on their Lowry Center facility.

Primary Objective

The objective of the FlexTech studies completed for each facility was to optimize daily operations and annual operating costs, while providing information to make immediate improvements and plan for the future.

Energy Benchmarking

Taitem used ENERGY STAR® Portfolio Manager to demonstrate how the buildings perform compared to other similar buildings and set future energy reduction goals. A mechanism to track energy use going forward was also developed.

Energy Studies and Advanced Modeling

Comprehensive energy studies identified operational deficiencies, maintenance issues, and opportunities to reduce energy consumption. Advanced energy modeling allowed Taitem to determine the most cost effective and high impact energy saving recommendations, while still focusing on low-cost/no-cost building upgrades for Lifetime Assistance to benefit from energy savings immediately.

FlexTech Report

Taitem provided NYSERDA-approved FlexTech reports that summarized conclusions made during the energy studies and clearly identified recommendations to improve building operations and energy use. The reports allowed Lifetime Assistance to understand the costs, energy savings, and payback associated with each measure.

Post Study Assistance

To further assist Lifetime Assistance with making informed energy investments that fit their needs and building systems, Taitem identified funding sources and financing for their recommended improvements and designed HVAC renovations.

The NYSERDA Flexible Technical Assistance (FlexTech) Program

Through the FlexTech Program, NYSERDA covers half the cost to produce an objective, site-specific, and targeted study on how to best implement clean energy and/or energy efficiency technologies. A NYSERDA-approved FlexTech Consultant will work with businesses to complete an energy study and provide expert, customized services and information to inform management of your energy use and investment decisions.

Discover how to reduce energy costs and incorporate clean energy with NYSERDA.

Visit nyserda.ny.gov/FlexTech



With more than 30 years of continuous operation, Taitem Engineering has completed dozens of projects across New York State, offering various services in the energy efficiency and renewable energy space.



NEW YORK

STATE OF OPPORTUNITY. **NYSERDA**