



Switzer Learning Center

Sustainable Design

■ Introduction

The Switzer Learning Center is a special education school for children experiencing learning, social, and emotional difficulties. The goal of the center is to provide personalized academic programs in a therapeutic environment, so that students' educational competence and psychological well-being are maximized. In an effort to reduce operational costs, the Switzer Learning Center looked toward the implementation of energy efficient and environmental-friendly practices.

Consulting the help of Tech Go Green and lee + mundwiler architects, a collaborated initiative was created to incorporate sustainable practices at the Switzer Learning Center.

■ Overview

The aim of the collaboration was to provide an initial sustainability audit so that retrofitting could be recommended based on the school's needs. The team conducted on-site walkthroughs, an examination of energy consumption data, and management interviews. Analysis was evaluated against best practices outlined by requirements for CHIPS and LEED (Leadership in Energy and Environmental Design) certification standards.

■ Design

The center had made redent remodeling improvements which included energy efficiency measures included. Since most of the immediate and affordable changes had already been completed, the proposed design program examined newer energy conservation opportunities that would require a larger investment. Therefore, the design was split into three phases for financing purposes.

Through the implementation of recommendations within the design, The Switzer Center will see a reduction in solar heat gain by approximately 70% and reduce overall energy demand by 20%.

Phase 1 Implementation of window tinting, lighting, and temperature control devices to reduce overall demand. Rebates and incentives for these measures were the highest and the return on investment the quickest.

Phase 2 Introduction of solar technology, which takes advantage of tax incentives and rebates to cover a portion of installation costs and protects the school against rising costs.

Phase 3 Includes the best practices solutions that provides a long-term vision for the school.

