

The **Efficient and Healthy Schools Program** aims to motivate and empower K-12 schools to reduce energy costs and improve energy efficiency, health, and resilience. The Program connects schools with practical solutions, provides technical assistance and resources, to significantly improve school facilities. This Program is led by the U.S. Department of Energy Building Technologies Office with technical support from Lawrence Berkeley National Lab and New Buildings Institute.

CASE STUDY

Solutions Strategist: Lansing School District



Project Scope & Approach

The Lansing School District serves over 10,000 students in 28 school buildings. In 2023, the school district worked with GreenLink Education to develop an ambitious and comprehensive sustainability plan that included collecting and analyzing data to identify opportunities to save money while reducing emissions and improving indoor environmental quality. The district also included multiple stakeholders in the development of its plan, including members of their school community, the City of Lansing, Michigan State University, Michigan Clean Cities, and the Ebersole Environmental Education Center. Specific projects identified from these planning efforts include energy efficiency retrofits at three buildings, onsite solar at ten buildings, and new construction of a renewable-powered elementary school. Infrastructure work identified for implementation is being funded through various sources, including bonds and IRA direct-pay tax credits.

Project Outcomes & Lessons Learned

Primary lessons learned for the district included the importance of stakeholder engagement in significant planning efforts as well as the need to develop a Sustainable Facility Master Plan. These key actions helped ease the implementation of future solar work and ensure efficient building design. They also found that implementing solar energy across the school district is easily scalable and replicable and provides further opportunities to engage students. As a result of this work, the district has updated its design specifications to ensure optimal energy efficiency and incorporate renewable energy sources.

Several important outcomes from the stakeholder engagement process included community buy-in for the ambitious solar installation projects, developing goal setting and roadmapping processes for the district to follow in future projects, and the staff and student engagement. Specifically, the district created a high school sustainability internship program that currently employs two student interns through the Workforce Investment Opportunity Act program.

PROJECT HIGHLIGHTS

While the project results of this work are impressive, the comprehensive stakeholder engagement has been highlighted here, as it is crucial for finding success in school communities.

- Included the municipality, their students and community, and local partners in the process
- Established goals first, and designed projects second. Launched a high school sustainability internship program.
- New construction will include ground source heat pumps and solar panels.
- Updated design standards for district to guide future projects.

Project Details

Location: Lansing, MI

Number of Students:
10,488

Schools in District: 32

Locale: Mid-size city

**Percent Free and Reduced
Price Meal:** 72%

Percent Title 1 schools:
78%

Funding Mechanism: Mixed
Bond, Federal, and State

Project Savings: >\$490k in
the first year of fully built-out
solar operations

Project Dates: 2023

Key Project Features:

- LED lighting retrofits
- Electric Vehicle school buses
- Ground source heat pumps
- Onsite solar photovoltaic
- Energy career pathways program
- Comprehensive Climate and Sustainability plan