Laramie County School District #1 Sustainability Project

Executive Summary

As part of the district’s 2011-12 renewable energy grant, the Institute for the Built Environment (IBE) was engaged by LCSD#1 to reach beyond the grant’s renewable energy installations in order to influence the integration of renewable energy and sustainability across the whole district, including district building & operations practices, existing building operations and maintenance, occupant behavior, and educational opportunities. The activities performed by IBE sought to work with district administration, staff, and students to understand current practices and identify opportunities to enact sustainable operational and educational pursuits. As a concluding contracted activity, IBE has compiled the final reports for major project activities and provided resources and specific and long-range recommendations.

Project goals:

1. Assess and inform district practices and administration toward greater sustainability.
2. Identify opportunities for high performance in building design, construction and operation.
3. Increase student, teacher and staff awareness of and engagement in sustainability and renewable energy.

Project Activities:

- Project Kick-off & Visioning
- Existing Schools Analysis
- High Performance Design Guidelines
- Teacher Engagement
- Education Resource Development

Project Kick-off & Visioning

When beginning any project, it is vital to first communicate the vision for the project to stakeholders and work together to define project goals and objectives. Through meetings with facilities leadership, and a workshop that included teachers, students, and district administration, IBE established the mindset, direction and metrics for project. This well-attended session provided input and direction and established momentum for the project going forward.
Existing Schools, Operations & Maintenance
Using the LEED rating system for existing buildings, Alta Vista Elementary and Triumph High School were analyzed to confirm best practices and identify opportunities for sustainability. Interviews with staff in facilities, maintenance, purchasing, and custodial helped to inform a report defining current practices. This preliminary report then guided the development of a Sustainable Operations & Maintenance manual, developed with the intention of being employed at all LCSD schools.

High Performance Design Guidelines
To provide a metric for future sustainable, high performing school construction, a set of guidelines for design, construction and maintenance were developed. These High-Performance Design Guidelines guide the development of energy efficient, healthy, and environmentally responsible facilities that reflect the beliefs and support the educational mission of the Laramie County School District #1. Building upon previous local and national efforts, the Guidelines are designed to be compatible with national guidelines such as LEED™ while maintaining regional requirements as identified in the Wyoming School Facilities Commission School Design Guidelines.

Teacher Engagement
To outline goals for integrating sustainability into teaching, learning, and culture of schools within Laramie County School District #1, a workshop was held to engage teachers from schools across the district. Teachers from all levels were presented information about sustainability, renewable energy, and using a school building as a teaching tool. Using interactive activities and working groups, participants developed lesson plan ideas and resources which are packaged as sustainability education resources and will be available to all teachers in LCSD.

Educational Resource Development
In order to offer opportunities for teachers to utilize sustainability and the district’s renewable energy resources, a set of educational resources were compiled for teachers. The educational resources focused on answering the question: What is a sustainable school? The resource also includes guidance for facilitative sustainable behavior, guiding student to understand and embrace their role in the energy efficiency and sustainability of their school.

In addition, a guidebook for student engagement in energy efficient operations was created. This document includes roles and responsibilities for key program members including, the program lead, faculty sponsor, principal, and student team members. The document outlines key activities and provides activity sheets and examples.