

## Case Study – Baraga Area Schools

### The Challenge

- Escalating energy costs and already tight operating budgets
- Inefficient and dated HVAC and water heating systems
- Various sources of energy loss throughout the facilities
- Overall environment was not optimized for learning (e.g., lighting and comfort of classrooms)
- Understood need for improvements; however, a creative solution was required to overcome budget challenges

### The Solution

- Sheren Energy conducted an energy audit to learn how and where we were using energy
- Baraga's customized energy savings plan included:
  - **Retrofitting and/or replacement of all light fixtures in the district**
  - **Domestic hot water upgrades**
  - **Variable speed controls for hot water heat**
  - **Digital energy management**
  - **Exterior door set replacement**
  - **Heat recovery and conservation measures for all instructional areas**
- We also quantified the amount of anticipated energy savings in terms of usage and dollars.
- The team also created a financing plan whereby Baraga Area Schools could use the identified savings to pay for the needed upgrades...meaning no out-of-pocket expenses for the district.

### The Results

- **Enables an annual savings of \$2,100 in energy costs**
- Combats escalating energy costs
- Provides a more comfortable and conducive to learning
- Offers systems that are easier and less costly to maintain