

# Energy Efficiency in Business

Alpena Combat Readiness Training Center  
Cuts Energy Costs, Invests Savings



**Energy Provider: Presque Isle Electric & Gas**  
Project Location: Alpena

## Saving Energy = Cost Savings

➔ **Saved 479,000 kWh/year**

- Upgraded 575 outdoor fixtures to LEDs
- Upgraded 47 building fixtures to LEDs
- Upgraded 115 fire station light fixtures

### **ACTION**

Extensive indoor and outdoor  
LED lighting upgrades

### **INCENTIVE**

\$25,000 in Energy Optimization  
Program rebates

### **RESULTS**

Reduced energy, maintenance,  
and cooling costs

# Energy Efficiency in Business

## Alpena Combat Readiness Training Center Cuts Energy Costs, Invests Savings



### COMPANY NAME:

## Alpena Combat Readiness Training Center

### ENERGY-SAVING ACTIONS:

- Upgraded 575 outdoor dusk-to-dawn light fixtures to LEDs
- Upgraded 47 building light fixtures to LEDs
- Upgraded 115 fire station light fixtures to LEDs

### RESULTS:

- 479,000 kWh/year savings
- Received \$25,000 in Energy Optimization Program rebates



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Serving as one of four training installations of its kind in the country, the Alpena Combat Readiness Training Center (CRTC) provides premier facilities, instruction, and airspace support to the Department of Defense, Department of Homeland Security, and local emergency responders to help meet mission requirements of combatant commanders and civil authorities.

Over the past month, users of the facility may have noticed some upgrades that go beyond the typical brick and mortar changes. A series of LED lighting upgrades that have been in development for several years was finally completed in October of 2014.

“The Alpena CRTC’s primary mission is to train and prepare warfighters to maintain a healthy and relevant force. However, at the same time, we are also cognizant that it costs taxpayer dollars just to ‘turn the lights on’ every morning. Therefore, the CRTC stays at the tip of the spear in energy optimization to remain robust in today’s economic environment.”

- Col. Andrew Roberts, Base Commander of the Alpena CRTC

### LED BENEFITS

The investment in LED lighting will have a number of immediate and lasting benefits for the Alpena CRTC, including:

- Reduced maintenance costs — LEDs last 35 to 50 times longer than incandescent lighting and about two to five times longer than fluorescent lighting.
- Reduced cooling costs — LEDs produce very little heat.
- Guaranteed — LEDs come with a minimum three-year warranty, far beyond the industry standard.

### SAVINGS INSIDE AND OUT

The Alpena CRTC upgraded nearly 50 light fixtures to LEDs in one of the Center’s main buildings for an estimated energy savings of 25,000 kWh per year. Additionally, 115 light fixtures were upgraded to LEDs at the on-site fire station for an estimated energy savings of 88,000 kWh per year. To obtain even greater savings, bi-level LED lighting was utilized in the fire station project, which enables the lights to operate at a lower level of output at times when full brightness is not needed.

In addition to interior lighting upgrades, the Alpena CRTC also converted 575 outdoor dusk-to-dawn light fixtures to LEDs—saving an

estimated 366,000 kWh per year. A unique approach utilizing atomic clocks and an astronomical schedule was implemented to control when the lights turn on and off, which has proven to be more effective than typical photo sensors. This strategy keeps lights from turning on unnecessarily on cloudy days or when individual photo sensors are blocked (such as by nesting birds).

“The new exterior lighting at the Alpena CRTC is dark sky compliant. This has two important benefits. First, it reduces light pollution in the evening sky, which is accomplished by the unique directional capabilities of LED lighting. Second, light is focused only where it is needed, often using 75 to 80 percent less energy than traditional parking lot and exterior building lighting.”

- Kevin Phillips, Energy Advisor with the Energy Optimization Program

### LOCALLY CONTRACTED

The projects had been in development for several years with assistance from Presque Isle Electric & Gas’ (Alpena’s local electric cooperative) Energy Optimization Program. Steven M. St. Hilaire, Resource Efficiency Manager with Air National Guard Region 11 (New England and Michigan), was responsible for the overall project design. Local Alpena businesses were tasked to execute the management and implementation of the upgrades, including:

- Meridian Contracting Services, LLC
- Standard Electric Company
- John’s Electric, Inc.

Upon completion of the project, the Alpena CRTC received \$25,000 in rebates from the Energy Optimization Program. The Air National Guard placed the incentive money back into the operations and maintenance budget of the CRTC, allowing them to reinvest in further energy efficiency projects at the base.

### LIMITLESS OPPORTUNITIES

Phillips added, “This program isn’t just for large organizations. It is a great program for all members of Presque Isle Electric & Gas—from farms, to restaurants, to industry. Residential members can also take advantage of lighting rebates, heating and cooling incentives, and more.”

To learn more about the energy-saving options available through your electric utility’s Energy Optimization Program, call **877.296.4319** or visit **michigan-energy.org**.