

# Phillips Academy



## LIGHTING ENERGY EFFICIENCY TREATMENT

ENGIE Services U.S. (ENGIE) completed a turnkey LED lighting and advanced controls retrofit at Phillips Academy's ice rinks in Andover, Massachusetts.

## THE PARTNERSHIP

Phillips Academy's 60,000 sq. ft. ice rink facility, which includes the Harrison Rink and Gurry Rink, contained 120 T5 and T8 fixtures. The existing lighting was inefficient and provided low light level output. ENGIE redesigned and replaced the existing lighting system with new LEDs and smart wireless controls, reducing the facility's lighting load by over 95,000 kWh - nearly forty percent. The LED fixtures, equipped with occupancy sensors, are controlled by a web-based system, which allows for granular control of the facility's lighting.

## 3 DIMENSIONS OF IMPACT

ENGIE is committed to building three dimensions of impact in every customer's future:



### Supporting People

- Facility management is now able to utilize flexible scheduling, dimming or turning off fixtures when they are not in use, further increasing their energy savings. When the rinks are in use, the light output on the surface of the ice is over 60 foot-candles, enhancing visibility and safety.

### Program Summary

- Utility Incentives: \$45,000
- Annual Energy Savings
  - Electric: 154,479 kWh
- Simple Payback: 2.64 Years
- Energy Efficiency Measures

### Energy Efficiency Measures

- Lighting
- Advanced Controls



#### **Saving Money**

- ENGIE was able to qualify the project for a significant utility incentive due to their preferred status with National Grid as a Project Expediter (PEX). Phillips Academy benefited from an incentive of \$45,000, allowing a simple payback of just over 2.5 years.



#### **Protecting the Environment**

- In addition to the 40% reduction in energy for lighting, the energy efficiency measures performed by ENGIE reduced NOX and SOX emission significantly, and reduced CO<sub>2</sub> emissions by over 195,000 pounds annually.