

# POWDR Adventure Lifestyle Company Boreal Mountain Resort



"The California sun is a beautiful thing. Now we will do more than enjoy it while we partake in our year-round adventure lifestyle offerings. We can convert it into clean energy, which will supply 15 percent of the energy required to power the entire Boreal and Woodward campus."

Amy Ohran, General Manager, Boreal Mountain Resort

### THE OPPORTUNITY

"Play Forever!" is the POWDR Adventure Lifestyle Company's long-term sustainability commitment to protect the environment for future generations. Through adopting an environmentally-minded approach to recreation, POWDR resorts reduced their carbon footprint by 49% between 2006 to 2016. The adventure lifestyle company amplified its dedication to sustainability in 2017, when they partnered with ENGIE Services U.S. (ENGIE) to create the largest solar installation at any ski resort in California. The 235 kW Boreal Mountain Resort solar project, was designed, installed, and commissioned by ENGIE on a rapid three-month project deadline.

#### THE PARTNERSHIP

POWDR, a family-owned and operated adventure lifestyle company, has integrated sustainability operations and philosophy throughout their nine mountain resorts in the U.S. In the summer of 2016, Boreal leaders met with the ENGIE project team and discussed how solar power could effectively reduce Boreal's electricity bills and carbon footprint. After many productive strategy meetings, the project scope snowballed into the California ski industry's largest on-site solar project, with 710 solar panels, built and installed to withstand the immense 509 pounds per square foot weight of the ground

## **Program Summary**

- Total Project Cost: \$615,963
- Economic/Tax Incentives: \$185,000 (Investment Tax Credits)
- ROI: 9.7 (years)
- Annual Energy Savings
  - · Electric \$45,000
  - · 326,169 kWh



Winner of the (NSAA) National Ski Areas Association 2018 Golden Eagle Award for Environmental Excellence. snow load. ENGIE relied heavily on excellent utility and county relationships to complete the complex installation and commissioning by an end-of-year deadline. Boreal leaders were fully engaged in the process, with weekly team meetings to update progress and exchange ideas.

#### **3 DIMENSIONS OF IMPACT**

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



#### **Supporting People**

• Developing and implementing a project of this scope and impact has progressed POWDR's committment to "Play Forever," ensuring sustainability at its resorts.



#### **Saving Money**

• ENGIE helped secure \$185,000 in investment tax credits to offset the cost of construction. In addition, POWDR is saving \$45,000 in annual electricity costs as a result of their clean solar power production.



### **Protecting the Environment**

The project creates an annual electric savings of 326,149 kWh, producing 15 percent of the resorts' total energy requirement. The project offsets more than 227 metric tons of carbon emissions, the equivalent to the carbon sequestered from 286 acres of US forest for one year.



Sized appropriately, Boreal's solar system was designed to handle 356 pounds per square foot of roof snow -- far more than the average snowstorm might deliver in any given day. This design reduces risk of potential panel damage before maintenance teams can remove accumulated ice and snow, and ensures optimum production of clean solar energy.



