# PEAK PERFORMANCE IN SAVINGS

**Custom New Construction Upgrades Bring a Mountain of Savings** 



## **Project Overview**







Left: Evaporator fan. Top Right: Process water heat exchangers. Bottom Right: Compressed air dryer.

What ideas do you have to save energy?

This energy efficiency project for a new Beef and Bison processing plant included four key interventions:

#### **Process Water Heat Exchangers**

Six heat exchangers were installed to remove heat from the refrigeration compressor discharge gas, which reduced the reliance on the gas cooler systems to remove the heat.

#### **Variable Speed Fans**

Two gas cooler fans were upgraded with variable speed controls with the installation of electronically commutated motors (ECMs).

#### **Fan Cycling Controls**

The evaporator fans were upgraded to cycle off once the desired temperature setpoint is reached rather than operating continuously.

#### **Compressed Air Dryers**

Two heatless desiccant air dryers were replaced with heated versions that require less purge air.

### **Annual Results**



491,000 kWh First Year Savings



\$19,000 Avoided Energy Cost



**228** Tons CO<sub>2</sub> **Scope 2 Emission Reduction** 









