

Energy Smart Industrial

CASE STUDY | NEW CONSTRUCTION

SUNTADO | BURLEY, IDAHO

Starting on the Right Foot with Energy Conservation

New construction presents a unique opportunity to maximize energy conservation from day one. By engaging with the Bonneville Power Administration's (BPA's) Energy Smart Industrial (ESI) program during the design and construction phase, the new cutting-edge Suntado facility in Burley, Idaho, optimized the facility's energy performance before operations began, resulting in over 6 million kWh of energy savings in the first year.

Over 100 consumer-owned utilities throughout the Pacific Northwest have enrolled in the ESI program which provides technical assistance and financial incentives to help industrial customers save energy and reduce costs. Suntado started working with ESI through their local electric utility—City of Burley—back when they were first pouring their concrete foundation, allowing them to incorporate energy efficiency considerations into the planning, design, construction, and commissioning phases of construction.

Suntado packages dairy and plant-based beverages using advanced processing technology that allows products to stay fresh longer at room temperature, while prioritizing sustainable operations. Getting a new plant up and running is important; additionally, project managers are busy making design decisions, usually having one opportunity to select the most efficient options. By engaging with ESI early in their design and planning phase, Suntado ensured they selected the most efficient equipment up-front, avoiding the need for expensive retrofits and maximizing the financial return from the outset. The financial incentives from City of Burley and ESI reduced the payback time on efficient equipment, allowing Suntado to take a comprehensive, long-term approach to energy conservation investments during plant construction.

They were also able to access pre-opening support services, including design review and optimization recommendations, pre-commissioning support, and start-up support. Plant start-up provides a unique opportunity for commissioning and optimization, which can be more challenging as a retrofit—post-construction—when production demands may limit these opportunities. Frequent communication and collaboration allowed ESI to support Suntado in completing over 50 custom and prescriptive upgrades across 11 industrial systems.



**Total Annual
Energy Savings:**
6,000,000+ kWh

**Total Annual
Cost Savings:**
\$272,700+

Simple Payback:
Before Incentives:
5.4 years
After Incentives:
1.9 years

**Number of Energy
Conservation Upgrades:**
50+

Looking ahead, the ESI program will continue to provide Suntado with technical support to ensure its equipment performs optimally and savings persist. Through investments in energy conservation, BPA and the City of Burley contribute to a more resilient regional electric grid while positioning Suntado for long-term competitiveness and growth, supporting increased employment opportunities in Burley, Idaho.

“Working with the ESI program was an outstanding experience for Suntado. Their team was with us from start to finish—helping evaluate equipment options, guiding us toward the most energy-efficient solutions, and ensuring we maximized our incentives. While the process was detailed and demanding, it resulted in a highly successful project and a significant rebate that supports our long-term sustainability goals. We truly appreciated the expertise, professionalism, and partnership throughout.”

Beau Lewis | Maintenance Manager at Suntado

Energy Conservation Projects

1. Centrifugal chiller variable frequency drive (VFD) control upgrade
2. Primary and secondary chilled glycol pump VFDs
3. Cooling tower fan VFD control
4. Air compressor supply side and dryer upgrades
5. Air handling unit, exhaust fan, and boiler fan VFD controls
6. Process agitator VFD controls
7. Pump system VFDs
8. LED Lighting

New Construction Projects Reap Financial and Operational Benefits

1. Identify efficiency projects.

An Energy Smart Industrial Partner (ESIP) will do an initial scoping of your construction site and plans to identify energy conservation opportunities and support optimal equipment selection and sizing from the get-go.

2. Obtain utility approval.

ESI will conduct a project assessment and investment-grade analysis for projects you select to estimate costs, energy savings, and ensure incentive eligibility.

3. Implement the project.

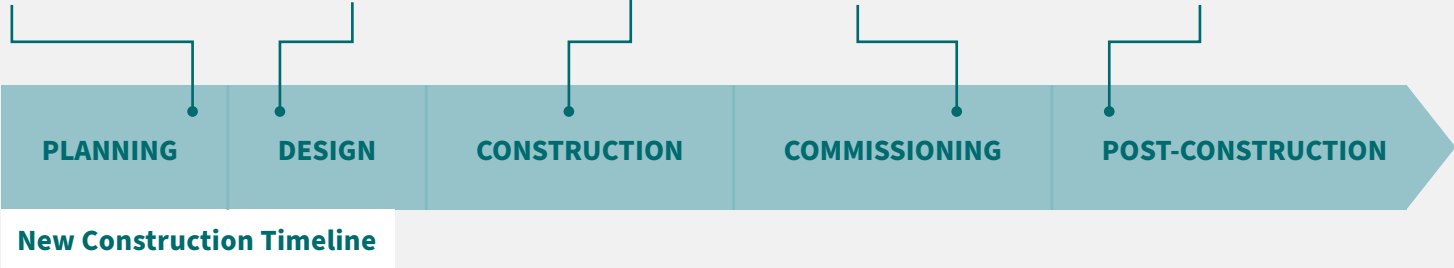
Your team completes construction and installs the equipment.

4. Post-project commissioning / M&V.

ESI will commission and optimize installed equipment for energy savings and production and set you up for lower energy bills and long-term operational benefits. They will also lead all required M&V activities.

5. Receive cash incentive.

Your utility will provide an incentive payment. Focusing on energy conservation from the beginning also supports cost savings from avoided equipment retrofits.



Want to start your new construction on the right foot?

Reach out to your ESIP or electric utility representative.



Energy Smart Industrial is sponsored by Bonneville Power Administration and its Northwest Utilities.