



Exhibiting operational growth with expert teams

Summary of issue or opportunity being addressed



Alongside matching the growing demand for Ecolab's bioprocessing and purification technologies, the team at Ecolab's Llantrisant manufacturing site is committed to reducing water and energy, as well as minimizing environmental impact of waste streams.

Introduction to technology or solution



The site implemented <u>Water Flow Intelligence: Powered by ECOLAB3DTM</u> and focused on asset-level water circularity processes. Energy demand was reduced through onsite solar panels, electric forklifts and an electric delivery vehicle. Ethanol waste is also recycled as high purity industrial alcohol (IDA 96) through highefficiency waste disposal methods.

Impact of solution



- 12.6 million gallons (~48,000 m³) in water savings
- 970 million BTU energy savings
- 36 metric tons of CO₂e avoided
- 2.6 million pounds of waste avoided
- \$220,000 (~€190,000) Total Value Delivered

Considerations during implementation



Over the past year, production at Ecolab's Llantrisant site has nearly doubled. Through employing digital technologies and world-class expertise, the facility was able to grow responsibly, implementing operational efficiencies to achieve resource and cost savings.