

Vybe Chiller Optimization Platform: Automation of “Setpoint Reset”

Vybe Offering

Vybe Energy’s software optimization platform delivers 25–30% energy reduction for existing commercial and institutional chillers, typically delivering payback within months. Vybe integrates with existing building automation systems to improve efficiency without replacing equipment, rewriting control logic, or disrupting operations. The platform is OEM-agnostic and designed to scale across portfolios.

Digital Plant Expert – on Autopilot

A supervisory machine learned, AI optimization layer that sits above existing controls:

- Builds **computationally inexpensive, chiller-specific performance model** using live data.
- Optimizes **individual and multi chiller** systems.
- Predicts near-term conditions and **re-optimizes setpoints every 15 minutes** to minimize power or cost (Time-Of-Use-aware where applicable) using established staging rules.
- Operates strictly within **OEM safety boundaries** and **fails-safe**.

Resulting in a **dedicated 24/7 expert virtual technician** at the controls.

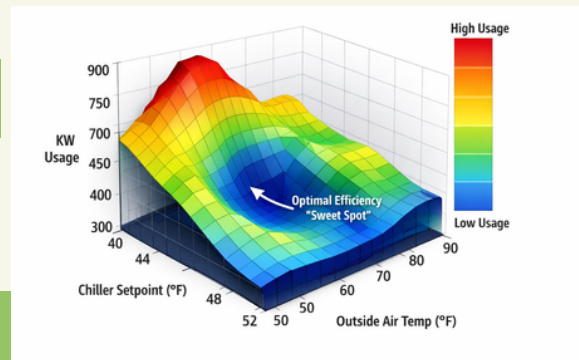
Easy Implementation

- **Connect** – Integrates with existing BAS using standard protocols.
- **Baseline** – Collects data to build machine learned model.
- **Optimize** – Performs optimized, automated “setpoint reset”.

Delivering Value at University Chiller Plant

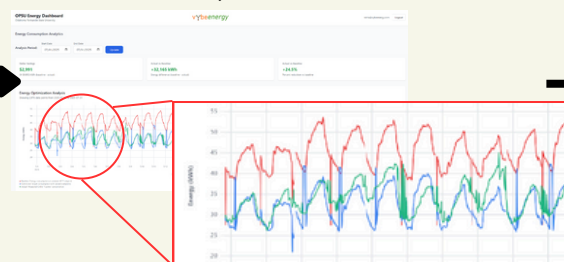
Key Benefits

- **Lower Energy Use** – Improves chiller efficiency under real-world conditions.
- **Fast Time to Value** – Software-led deployment delivers results in days/weeks.
- **No Rip-and-Replace** – Works with existing chillers and controls.
- **Scalable, Repeatable** – Consistent performance across sites.
- **Operator-Aligned** – Preserves equipment constraints and intent.
- **Future-Ready** – Foundation for broader energy optimization.



Implemented Vybe solution Q2 2024

- 20 year old system
- 26 buildings total



27% decrease in energy use

16% decrease in energy cost

2x fault detection

0% impact to comfort