ENERGY OPTIMIZER

Save energy costs today

Unlock Savings with the Energy Optimizer!

The Energy Optimizer, a cloud-based application co-developed with leading chemical manufacturers, utilizes mathematical optimization and machine-learning-based price forecasts to **minimize energy costs for electricity-powered industrial processes**. The application recommends optimal power loads, enabling **up to 15% savings on energy costs**.



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Why this matters now

- **Rising energy prices:** Recent geopolitical events and the transition to cleaner energy sources have led to unprecedented energy price levels and volatility.
- **Long-term uncertainty:** Future energy markets are expected to remain unpredictable, making fixed-price contracts less viable.
- **Grid stability:** Lowering energy consumption during peak demand contributes to enhanced grid stability.
- **Emissions reduction:** Reduced energy usage during peak times lowers CO_2 emissions, as fossil-fuel part of the energy mix is highest at peak demand.

Key benefits Energy Optimizer

- ✓ **Decrease energy costs:** Optimizes load to produce a target amount of product at lowest possible cost, or making a variable amount of product to maximize profits.
- ✓ **Return on investment in weeks:** With Arundo's standardized deployment process ROI will be delivered in weeks, not months or years.
- ✓ **Increase revenue:** Takes into account sell-back clauses in fixed-price contracts, allowing increased revenue by selling back power to the market when spot prices are high.

Key features Energy Optimizer

- ✓ **Adaptable:** Available for any electricity-driven process, tailored to individual factory setups, accounting for both physical and operational constraints.
- ✓ **Integrating any price forecast:** Can connect to any 3rd party electricity price forecast provider.
- ✓ **Accessible and secure:** Easily accessible and secure (ISO 27001 certified) solution available as a web app, running on the Arundo Foundation tech stack.
- ✓ **Seamless process integration:** User-friendly interface with outputs tailored to a plant's power nomination and production process.

Unlock the power of optimization with the Energy Optimizer:
Navigate the evolving energy landscape & secure your company's profitability.

Additional areas where we can support you

Energy Optimizer can be used for any electricity-driven process where there is an opportunity to modulate the load, such as:

- Water electrolysis for hydrogen
- Chlorine & caustic soda electrolysis
- Aluminum smelting
- Silicon smelting
- Electric arc steelmaking
- Paper and pulp production

About Arundo Analytics

Arundo Analytics helps equipment operators to make better decisions and improve efficiency, reliability, and sustainability. Our products link data science, cloud computing, and AI with industrial IoT, providing actions beyond simple alerts. Broad industry experience makes us a powerful partner for digitalisation and process optimization.

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