Energy Cost Optimization in Heavy Industries

SAS® and Microsoft® Azure Solution Accelerator

European energy is expensive.

Some manufacturers will see a **10x increase in their energy costs** – this could be the difference for them in making vs. losing money.

It's not just a problem of rising prices. **Supply may be constrained, leading to rationing.**

– *"Predictions 2023: Smart Manufacturing" Forrester report*

IoT Analytics Solutions Are Key to Resiliency in This Energy Crisis

By 2024, the top five companies in each sector will be those that used technology to innovate their way out of a global crisis.
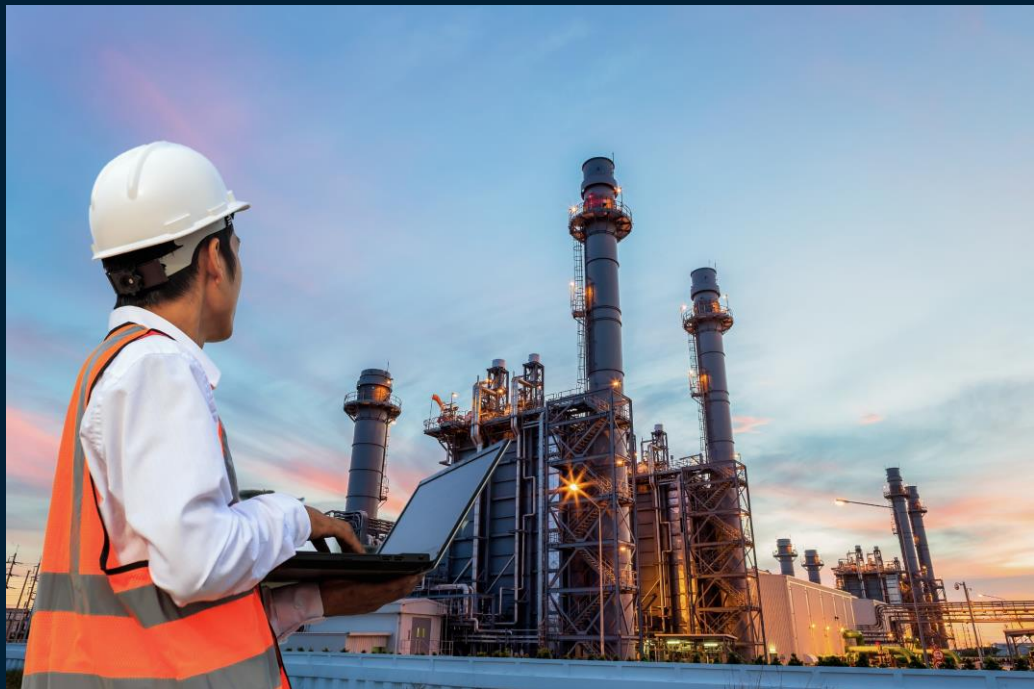
– IDC FutureScape: Future of Digital Innovation 2023 Predictions Highlights

IoT helps manage surging energy prices.

30% percent of manufacturers will pivot IoT investments to reduce their energy bill.

–"Predictions 2023: Smart Manufacturing" Forrester report

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Tackling the European Energy Crisis

CHALLENGES

- Natural gas prices spiked, making some production lines uneconomical
- The price of EU CO2 permits has increased by 1.000% over 5 years
- Challenge in complying with emission reduction standards

Customers find the reduction of variability in combustion processes to be too complex without advanced analytics

IDEAL SOLUTION

- Fast to implement and realize savings quickly
- Actionable by operations frontline workers
- No impact to operations, no plant shutdown
- Easy to measure and track improvement progress

Industry-proven actionable insights for driving optimal energy consumption

DESIRED OUTCOMES

- Reduction in energy consumption, maintaining reliable quality and yield
- Reduction in variance creates a more stable process
- Increase in overall process understanding

Reduce energy costs and CO_2 certificate spending and improve ESG rating

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Why SAS and Microsoft for Energy Cost Optimization (ECO) in Heavy Industries

Now, manufacturers can unlock *even more* critical data insights that help them optimize energy usage and improve their ESG rating.

SAS and Microsoft will help you save up to 10%* on your energy costs and CO_2 certificate spending.

* Estimate is based on real customer results and could also be higher.

Energy Cost Optimization Solution

Solution Key Features

1. Automated Explainers

Provide engineers with the missing insights needed to impact key process parameters with a relationship analyzer for energy consumed and process parameters

2. Shift Explainers

Identify what influencing factors cause a high or low energy consumption of individual shifts or batches to assist day-to-day tuning of the production process
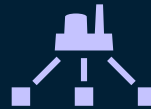
3. Setpoint Optimizer

Gain recommendations for operators on the exact setpoints they should apply to the process in order to minimize energy consumption while maintaining quality by using a set of mathematical optimization solvers

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