Make sustainable decisions for plant performance and operation

Modelon helps energy system engineers predict plant efficiency and optimize operational cost for numerous what-if scenarios.

With changing government regulations and increasing demand for low-cost energy sources, energy system engineers must adapt their facilities quickly. Due to the complexity of large-scale industrial systems and the volatility of energy sources, energy system engineers lack insight into which choices to make now that pay off in the long run.

Our Solution

With Modelon's Energy Systems Optimization solution, energy system engineers can precisely analyze the performance of both existing and planned facilities across various scenarios. Our solution facilitates simulation and techno-economic optimization to aid the selection of optimal components and energy sources, enabling cost reduction and efficiency maximization.

Energy Systems Optimization consists of two major components – a state-of-the-art system simulation platform and industry experts.

Modelon Impact – Modelon Impact is our flagship simulation and modeling platform. Energy system engineers can create a digital twin of their facilities, employing commercially validated and customizable system components suitable for full systems and subsystems. With robust solvers and the capability to input custom data, users gain precise insight into current and future performance and economic trends of their facilities over time.

Modelon Industry Experts – Modelon's in-house simulation and modeling experts have decades of experience across industry applications. Our experts offer invaluable assistance throughout a customer's plant optimization journey by understanding a customer's unique scenarios and challenges. Experts guide customers through the design and simulation process to generate actionable datasets.
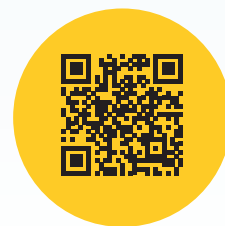
Process

1 **Discover:** Speak with Modelon experts to determine your project's goals and key challenges.

2 **Plan:** Determine project approach and milestones towards success.

3 **Optimize:** Perform optimizations inside Modelon Impact that produce accurate and actionable data.

4 **Decide:** Share experiment data, iterate on system design, and meet project milestones.

Answer questions including:

1. How much will building and operating a hybrid energy system cost based on our system requirements for a given time horizon?

2. How can we begin investing in a new energy system while maintaining flexibility for the future?

3. How will price changes of various fuels impact system operations?

4. Given our budget and performance requirements, what are the optimal component sizes for a system?

Speak with Modelon's Energy System Optimization experts:
https://modelon.com/contact-us