

## Redefining what's Possible with Energy Management

Do More than Just Monitor Your Energy Usage. Manage It.

MPC-AURA is a truly comprehensive Energy Management Solution. That's because our software not only MONITORS equipment but also provides alerts and reports that let you MANAGE your energy use... providing actionable data when it's needed.

MPC-AURA Software-as-a-Service (SaaS) is the first and only platform built with 37 years of Energy Management experience and captured in an easy-to-implement packaged software solution. Hosted in a private cloud secured by an SSAE 16 Certified Datacenter, MPC-AURA offers easy setup to aid in the continuous control and improvement of your facilities.

### Energy Management... and More

MPC Energy has an unparalleled legacy of empowering clients with increased profitability and the benefits of environmental stewardship. Other engineering and software companies claim energy optimization but at best only offer metered use, while Aura presents manageable views of energy use throughout the plant thus eliminating the excuses as to why energy is up or down.

Only MPC offers large-scale manufacturers true "optimization" by assessing the energy savings opportunities, working hand-in-hand with your team as needed, diving into the details to get at the data that counts, and establishing ideals that can become the new standards by which your organization operates.

The result is evident in increased energy savings, lower capital outlays, greater productivity and a safer work environment.

**MPC-AURA**

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**MPC-AURA**

Energy Management **Solutions**

[www.mpcenergyllc.com](http://www.mpcenergyllc.com)

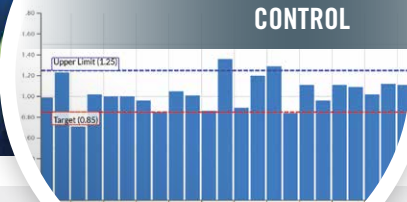






#### REAL-TIME ANALYTICS

#### CONTROL



#### FINANCIAL VISIBILITY

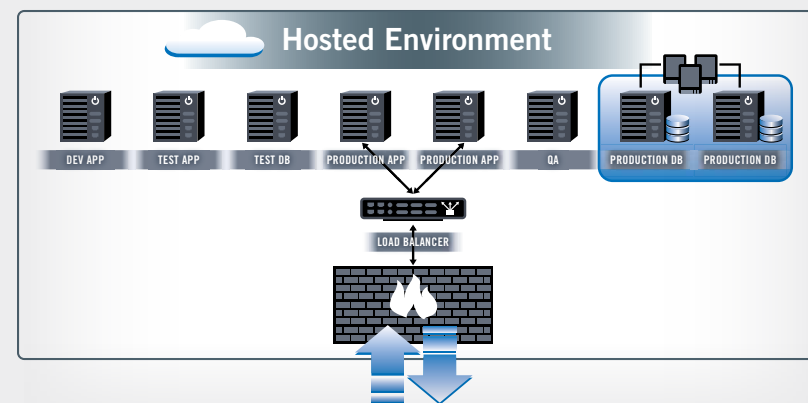
#### INSIGHTS



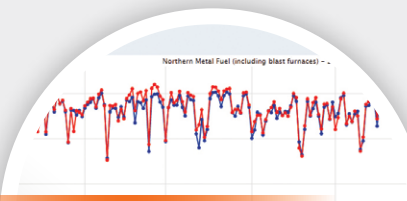
## MPC-AURA is the ultimate “do-it-yourself” Energy Management solution

MPC-AURA is a Software-as-a-Service (SaaS) tool that provides:

- Real-time analytics for faster decision making
- Historical modeling to know if you really have reduced energy use per unit
- Accurate budgeting of all energy use
- KPI monitoring and reporting with automatic alerts whether it is energy related or preventive maintenance
- Customizable dashboards for all levels (C-level, Operators, Managers)
- Unlimited users and devices with automatic software updates
- Connection of multiple facilities, hierarchy of parent – child relationships, comparisons for benchmarking purposes of like processes and plants



Secure Cloud Hosted Solution with an award-winning cloud hosting provider. All data transferred and at rest is encrypted for safety and privacy.



#### PREDICTABLE MODELING

#### HISTORICAL • CURRENT • POTENTIAL



#### CUSTOMIZABLE DASHBOARDS

#### FLEXIBILITY



## Greater Visibility into Energy Use, Productivity and Safety

MPC-AURA's home dashboards allow for unlimited clients and tags to customize with specific individual KPIs

### Better decision making for the C-level Suite

Financial visibility continuously updated and customizable to show exact data needed for faster and more accurate decision making

- No capital expense requirement for hardware, software or related infrastructure
- MPC-AURA will identify, quantify and validate ROI for any energy-related Capital Improvement opportunities
- Enterprise platform that scales from single unit of production through multiple plants globally, providing a standardized view from an energy perspective

### Accurate, up-to-date information for Engineers and Managers

Real-time reports on energy use with views of actual versus achievable savings to help reduce energy costs and GHGs

- Energy Balance feature compares main to sub-meters for continuous monitoring and reconciliation of energy spend
- Energy Log that captures energy savings opportunities and assigns accountability and cost to energy issues
- Exception Logs to capture problems that reoccur

### Faster response time for Operators

Multiple screens offer visibility of various pieces of equipment displaying energy use, overall equipment effectiveness or safety concerns

- Provides an alert system to notify users when variances are occurring whether it is energy related or preventative maintenance
- Information is accessible via any device with Internet access

### Continuous Improvement. Positive Results.

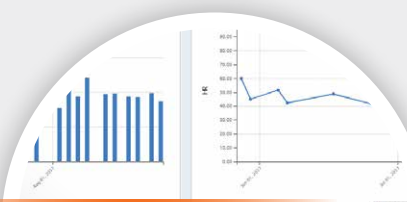
Our MPC-AURA software has positively impacted the energy consumption, efficiency and productivity of a variety of industries:

**Textile | Chemical | Glass | Food | Electronics | Aluminum | Gasoline | Steel | Paper | Cement | More**



#### REAL-TIME REPORTS

#### ACCOUNTABILITY



#### MULTIPLE SCREEN VIEW

#### ACCESSIBILITY



“The Energy Reduction Management System implemented in this plant is real and clearly differentiates MPC’s programs from others... we were able to implement demand control technology to verify actual results versus the predicted model. This has allowed us to look at energy as a key measure on a daily basis... become aware of the total process from the energy side... and become more competitive in the marketplace.”

**Continental General Tire**

“The great credit to MPC in this process is that they recognized there were many drivers to cost savings... and energy savings had to be balanced against a variety of factors including inventory carrying costs and different achievable run rates based on different final products.”

**Syngenta Global**

## Corporate Energy Optimization

**Energy Cost Savings: \$150,000,000 annually, 13 plants corporate-wide**

**Situation:** To ensure ongoing management and control of energy resources in the refinery, an energy management system was needed. Valero's refinery instituted an Energy Stewardship Program in 2007 committed to reducing energy costs by \$100 million per year without affecting throughput and quality. An energy gap analysis and energy and process performance review were conducted.

**Result:** In the first two years, the refinery's Solomon Energy Intensity Index decreased from an average of 99 to 86. This was accomplished through a combination of energy reduction initiatives as well as increased refinery reliability.

## Implementation of Energy Management System for Tire Manufacturer

**Annual Energy Costs: \$11,200,000 | Energy Cost Savings: \$1,380,000 annually | Energy Cost Reduction: 12.3%**

**Situation:** A global tire manufacturer contracted MPC to provide and implement an Energy Management System. The company specializes in the design, manufacture and marketing of tires for passenger cars, light and medium truck tires with subsidiaries for motorcycle and racing tires.

**Project Results:** Energy data was used in conjunction with Production data, waste minimization and employee productivity data to allow for lean manufacturing at the lowest energy levels. Annualized savings reached \$615,000 and continued to climb to \$1,382,000 the first year and increased to 47% reduction over the next nine years through continued improvement.

## Identifying High-Value Capital Project at Large Steel Manufacturer

**Situation:** This Integrated Steel Mill has a specialized division called the Hot Strip Mill that reheats and rolls in process steel. There are five Reheat Furnaces in the Hot Strip Mill. Typically, four furnaces are in operation simultaneously. These furnaces burn millions of dollars per year in Natural Gas. Because of the high fuel cost associated with this process, the Steel Mill repaired heat recuperators on the furnaces aimed at achieving a 17% – 19% fuel savings.

**Result:** After evaluating all the available information, key questions were identified to justify the energy savings project. MPC-AURA helped answer the questions with visibility into key data and showed a financial justification and positive ROI for the project to move forward.

“MPC... the standard bearer... it is the foremost company that has developed energy management in the industrial sector, and it had the foresight to look at decreasing energy consumption (costs) before those costs were volatile or even considered a cost variable that could be decreased.”

Jigar Shah (Founder of SunEdison) in ‘Creating Climate Wealth: Unlocking the Impact Economy’ (2013)