

Ensure the competitiveness of your company ...

Efficiently comply with statutory stipulations

- Many companies must comply with statutory regulations regarding energy consumption
- Use a TÜV-certified energy management solution according to DIN EN ISO 50001 with SIMATIC Energy Suite, SIMATIC Energy Manager PRO¹ and easuring components
- Successfully create transparency in the energy balance of your company
- Document energy efficiency projects with associated measures and savings



Reduce operating costs

- Take control of your energy consumption and counteract the rising energy costs of your Company with energy planning and forecasting
- Minimize your energy costs by reducing consumption and identifying "energy hogs" and optimized energy purchase
- SIMATIC Energy Manager PRO¹ provides you with all of the energy data needed for this

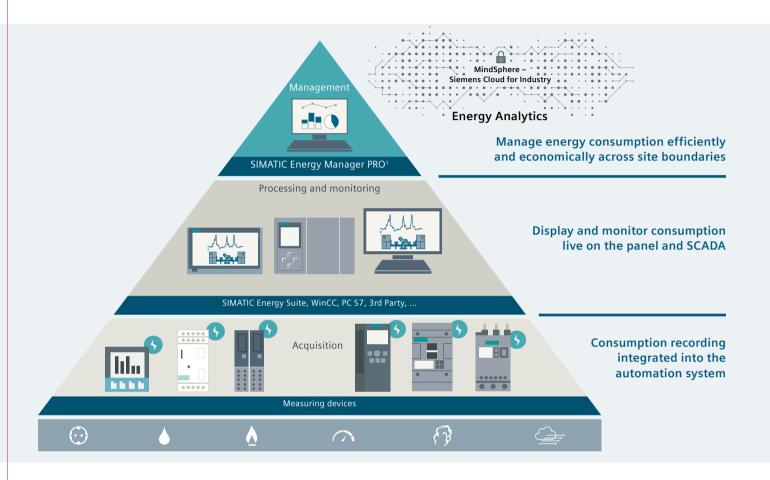


Ensure your competitive edge

- State subsidies and energy and power tax benefits result in financial flexibility for investing in the core business
- Improve the market value and image of your company through a certified energy management system according to DIN EN ISO 50001



... with SIMATIC Energy Manager PRO for efficient energy management



SIMATIC Energy Manager PRO¹ – Certified energy management

Anyone who would like to sustainably manage their energy costs and is already looking ahead to the digital future today will equip their plant with integrated energy measuring systems. Energy management is perfectly positioned within the automation system – where the largest portion of the energy is consumed.

SIMATIC Energy Manager PRO can obtain energy data and more from the SIMATIC Energy Suite, SIMATIC WinCC, SIMATIC PCS 7, SIMATIC PLCs, and directly from measuring devices.

The correlation of energy and production data is possible thanks to the integration into the automation system which allows the simple determination of energy costs per unit, machine, shift, etc.

Typical tasks include energy efficiency controlling, cost center accounting, forecasting, and company-wide energy analysis (reports, dashboards, KPI determination), as well as the optimization of energy purchase. The system is TÜV-certified and is fully compliant with the statutory Requirements of ISO 50001 and energy-efficient operation, which also reduces operating costs.

Advantages at a glance:

- Identification of "energy hogs"
- Future-oriented and ISO 50001-compliant system
- Provides support for optimized energy purchase

SIMATIC Energy Manager PRO – Your highlights at a glance



- ISO 50001-compliant and TÜV-certified
- Direct connection to production (SIMATIC Energy Suite, WinCC V7, SIMATIC PCS 7, PLC, and third party)
- Configuration import of the SIMATIC Energy Suite
- Cost center accounting with ERP connection (e.g. SAP)
- Energy efficiency controlling and project planning
- Flexible representation and analysis options (e.g. reports, widget-based dashboards, management KPIs statistic functions)
- Efficiency monitoring of conversion processes (e.g. cooling plants, heat exchangers, pumps, compressors)
- Evaluation of the actual state of the energy on the basis of a defined baseline (according to DIN EN ISO 50006)

SIMATIC Energy Manager PRO – Your benefits



Compliance with statutory regulations due to

- TÜV-tested energy data recording system according to ISO 50001
- Identification of potential savings and action controlling
- Environmental reporting at the company level (sustainability)



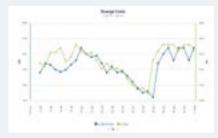
Reduction of operating costs and ensured competitive edge by

- Energy efficiency data for detecting energy waste (leaks and standby consumption)
- Energy cost accounting on a cost-by-cause basis



Efficient energy purchase by

- Support in selecting the optimal energy supplier
- Optimization of the energy supplier contracts by consumption forecast and contract simulation
- Verification of the incoming invoice



Efficient and intuitive energy analysis by

- Key data definition (drag and drop) and flexible display (widget)
- Integrated statistics functions
- Standard tools for automatic information display (reports, dashboard, etc.) also on mobile devices



Investment protection thanks to

- Scalable systems, from small entry-level solutions to large multi-plant solutions
- Seamless integration into SIMATIC automation such as SIMATIC Energy Suite
- Open interfaces for incoming data and data forwarding

SIMATIC Energy Manager PRO in use

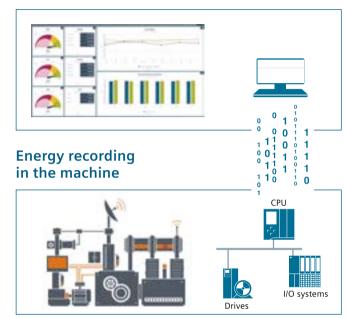
SIMATIC Energy Manager PRO supports you in the efficiency analysis of your machines. Instead of the analysis of complex raw values, SIMATIC Energy Manager Pro compiles the values and provides them to you as meaningful key data.

On the basis of this machine efficiency key data, you can carry out an evaluation of the efficiency in the different machine statuses and thus obtain information about efficiency improvements, e.g. the reduction of standby losses, to sustainably increase efficiency.

Standardized, meaningful key data such as degree of energy usage, degree of energy efficiency or energy quality factor allow the user to simply and easily evaluate and monitor the efficiency of a machine.

In addition, you can evaluate whether the machine is being operated with optimal energy efficiency and develop scenarios as to how you can improve this status.

Evaluation in the SIMATIC Energy Manager PRO



Your benefits:

| Operator | Project engineer |
|--|---|
| Make energy consumption visible Energy data linked with production data | Integrated solution Due to configuration import of the SIMATIC Energy Suite |
| Save energy costs Identify "energy hogs" and optimize energy purchasing | Efficient configuration Due to custom-tailored key data and flexible Web dashboards |
| Efficiently meet legal requirements Thanks to ISO 50001 conformity and TÜV certification | Open and secure system Thanks to numerous interfaces and secure communication |

Scalability

From the production machine all the way to cross-plant energy management

SIMATIC Energy Manager PRO – four examples of our worldwide references

SIMATIC Energy Manager PRO¹ is successfully used internationally by well-known companies in a wide variety of industries to comply with statutory regulations and to sustainably reduce energy consumption and costs.

Secure the competitive advantage for your company thanks to operations management that is optimized in terms of energy economy. Our team of experts will support you in the implementation of Energy Manager PRO

GF Automotive - Automotive supply industry



Schmitz Werke – Textile industry



Customer benefits

- Coherent overall concept from the field level to the management level
- Distributed and automatic energy data acquisition with SIMATIC ET 200SP Energy Meter
- Ensured DIN EN ISO 50001-certified energy management process
- Verification of the energy efficiency potential of machines (die casting machines)
- Tracking and implementation of savings measures (e.g. 4,500 m³ of compressed air/WE, 10% CO₂ emissions/5 years)

Customer benefits

- Easy identification of energy efficiency measures (quiescent current and compressed air leakage)
- Amortization of the energy management system through the identification of energy waste directly after the installation
- Reduced personnel costs due to automatic acquisition
- Additional cost savings of 5% possible

Saint Gobain Oberland – Glass industry



Infratec – Industrial park



Customer benefits

- Savings in the double-digit millions per year thanks to surplus settlement and EEG surcharge
- Optimization of production (glass melting tanks)
- Weighing up of investment based on the energy consumption allows
- Automatic and user-friendly reporting
- Scalability for future expansions

Customer benefits

- Operating costs reduced by €380,000 to €446,000 annually due to EEG-related savings
- Further costs savings expected due to efficient energy saving measures
- Significant increase of the energy efficiency
- Detailed assignment of the energy consumptions

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Siemens offers automation and drive products with Industrial Security functions that support the safe operation of the plant or machine. They are an important component in a holistic Industrial Security concept. With this in mind, our products undergo continuous development. We therefore recommend that you keep yourself informed with respect to our product updates nd only use the respective current versions.

Further information can be found at:

http://support.automation.siemens.com.

There you can also register for a product-specific newsletter.

To ensure the secure operation of a plant or machine, it is also ecessary to take suitable preventive action (e.g. cell protection concept) and to integrate the automation and drive components into a state-of-the-art holistic industrial security concept for the entire plant or machine. Third-party products that may be in use must also be taken nto account.

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