

ENERGY MANAGEMENT SYSTEM (EMS)

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ABSTRACT

Energy management includes small tasks such as monitoring monthly energy bills and switching on energy-saving bulbs. This can lead to larger improvements. Such as making financial projections to turn around environmental energy services and making other improvements to clean energy resources and lower energy costs in the coming years. Energy management is the process of monitoring and optimizing energy consumption in a building to conserve energy use. To simplify things, we can define energy management as a process that involves optimizing energy use for the best possible results and taking steps to conserve it. It also includes planning related to the production of energy and its storage for future use. Therefore, the ultimate objective of this process is not only to save costs but also to achieve complete environmental sustainability.

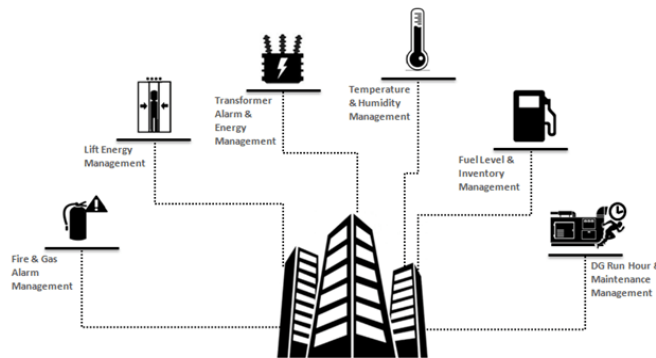
Some of the steps for the process of energy management are

1. Continuous data collection.
2. Identifying optimizations in flow rates to improve energy efficiency.
3. Calculating return on investment.
4. Execute energy optimization solutions.

Energy Management – 10 Ways to Improve Energy Management

1. Establish Benchmarks and Evaluate
2. Analyze the Energy Use for Energy Management
3. Set Short-term Goals for Energy Management
4. Actively Manage the Actual Energy Consumption
5. Communicate and Analyze your Progress
6. Develop a Well-Structured Plan
7. Establish Accurate Rules and Regulations
8. Use Power-saving Technologies
9. Seek In-house Knowledge
10. Don't be afraid to take risks

Energy Management System (EMS) we'll be tracking all types of pieces of equipment like lifts, electric panels, diesel generators etc.



Reduce operational costs

The most obvious of all benefits is the EMS’s ability to reduce electricity costs by monitoring and optimizing energy used for lighting, heating and cooling, ventilation, etc. By collecting data, it allows administrators to predict energy usage and budget for the same more effectively. You can also use this data to prevent unnecessary work such as ensuring all lights are switched off after working hours, etc.

Improve overall well-being and productivity

If a person is uncomfortable in his/her environment, they will not feel like working. Thus, temperature regulation and lighting are the important to ensuring productivity. With an EMS, you can regulate indoor temperature while minimizing energy usage as well as keep the area well-lit with minimal lights. This improves overall well-being and boosts productivity. Similarly, maintaining optimal ventilation, lighting and temperature keeps mold and bacteria at bay, thus reducing the risk of illnesses.

CONCLUSION

Energy management is today’s need of the hour. We have already talked about how it aims to conserve energy turning into cost savings. But there are plenty of more reasons attached to the scene. Once you’ve taken actions to save energy, it’s also important to find out how effective your actions have been.

REFERENCES

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