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مجلس الشرق الأوسط وشمال أفريقيا للترفيه والحدب السياحي
Middle East and North Africa Leisure & Attractions Council

LET'S TALK SAFETY – OCTOBER 2022

ENERGY MANAGEMENT INNOVATION IN LEISURE & ENTERTAINMENT

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Leisure and entertainment is a massive industry comprising numerous categories or segments. These include amusement parks, athletic events and cinemas, among others. One of the fastest growing markets with no indication of slowing, it's also one of the world's most energy intensive industries. Therefore, this industry has much to gain from energy management innovation.



In a world where energy is becoming scarce, it is important to explore new ways of reducing our carbon footprint. Energy management innovation led by new technologies is an important part of this process.



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Why is Energy Management important?



The term energy management refers to the application of technical and economic concepts to the cost of energy to offer necessary services in buildings and enterprises. Improvements in energy efficiency, altered energy consumption habits and the utilisation of alternative energy sources all contribute to lower energy costs.

As such, energy savings are mandated by three worldwide priorities, including:

- Environmental quality (reduce acid rain and climate change)
- Economic competitiveness (lower prices and generate jobs)
- Energy security (reduce oil imports and balance of payments)

What can the Leisure and Entertainment Industry do?

Leisure and entertainment businesses are a significant contributor to global carbon emissions. Thus, it is imperative to investigate strategies to lessen the environmental impact. Energy management innovation offers a solution that not only aids in the reduction of emissions but also helps in the reduction of operating costs and the improvement of operational efficiency, such as lowering electricity costs by making buildings more energy-efficient or assisting in the reduction of carbon emissions.

In this sector, several best practices for energy management innovation may be adopted.





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- **Incorporate Renewable Energy**



Incorporating renewable energy sources into a leisure and entertainment facility's power supply is one of the greatest practices that will aid in enhancing efficiency and sustainability. This consists of solar panels, geothermal heat pumps and wind turbines, among others.

- **Create a Demand Response Plan**

Creating a demand response plan for the facility's heating and cooling systems by avoiding the usage of power when it is neither necessary nor desirable will help in cost saving.

- **Plan Energy Management**



Creating an energy management plan (EMP) for the facility will help in identifying areas where energy may be saved or improved by various methods, such as system upgrades (HVAC Controls, BMS, demand control ventilation and lighting enhancements including smart lighting control= and high efficiency lighting). Energy Performance Contracts are good examples of innovation where we tie up with ESCO companies.



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Leverage IoT-enabled Energy Management System

Internet of Things (IoT)-enabled energy management system (EMS) can help to reduce the cost of energy by automatically controlling power usage therein significantly saving cost for the business. An EMS is an intelligent system that learns how to best use energy based on the usage patterns of a business, which can include power usage, occupancy levels and other factors. The system then provides this information in real-time to its users and helps them monitor their energy costs.



For example, if a company has an IoT-connected EMS in place, the system can automatically turn off the lights when one person leaves a room or office and turn them back on when they return. One of the most important benefits of IoT-enabled EMS is the ability to learn from a business' usage patterns. When a company uses the service for the first time, it can take weeks or even months for an EMS to be able to accurately predict when and where energy is being used. However, once these patterns are learned, they help an EMS provide accurate predictions at any time

by considering factors such as occupancy levels and other environmental issues. In this way, a business can get the most out of their smart energy technology.

Design, Build, Operate to a Standard

When we design, build and operate projects we should be mindful of considering and incorporating all these energy management principles and standards until the final testing and commissioning works.

We can use green building certification as an optimisation tool in benchmarking energy performance with other similar facilities locally and around the globe.



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The green building rating system is a method to evaluate the environmental performance of buildings or spaces. Certification programmes exist to help building owners and managers measure their progress towards achieving sustainability goals. The best certification programme will depend on what your needs are and what kind of building you own or manage.



Source: ecomena.org

There are many certification programmes to help building owners and managers measure their progress towards achieving sustainability goals where a lot of innovation exists. These certifications can come from a variety of sources, including the **Building Owners and Managers Association (BOMA)**, the **U.S. Green Building Council, Leadership in Energy and Environmental Design (LEED)** and more.



Certifications can be a valuable tool for business. They can help demonstrate to the public that the organisation is committed to providing a certain level of quality and service. They can also help prove to customers that you have the knowledge and expertise to do what they need done.

An energy star certification, for example, means that you've gone through a rigorous process of testing and evaluation by an independent third party. The certification is not just about saving energy; it's about saving money as well, because it guarantees that the building will use less energy than required by code. As a process certification reiterates the quality of a building and provides owner and occupants with peace of mind. It also offers many benefits such as reduced insurance rates, tax benefits, increased property value, improved energy efficiency and greater resale value.



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Create a robust energy strategy



In summation, for us to succeed on this energy management innovation journey, we must develop our energy strategy and set goals. We also need to get the support from business' top management, ensure to establish administrative and management structure, benchmark. In addition, we must track energy cost and use, conduct energy audits, identify, analyse and prioritise opportunities, implement energy projects, processes and do training. Finally, we must monitor, target and report the outcomes.



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