New Horizons

in Responsible Gambling Conference

January 27-29, 2014 Vancouver, B.C.

Energy Conservation in Gaming Facilities

SUMMARY

An energy audit conducted by a competent authority provides gaming facility managers and energy specialists with a range of measures that offer cost, consumption and emissions reduction opportunities.

PRESENTERS

- Innes Hood, Senior Sustainability Consultant, Stantec Consulting Ltd.
- Michael Urbas. Energy Manager and Commissioning Engineer, Great Canadian Gaming Corporation.

PANELISTS

- Jeff Lee. Energy Operations Manager, Gateway Casinos and Entertainment Ltd.
- Dr. Cristian Suvagau. Team Lead, Power Smart Engineering, BC Hydro.

ENERGY AUDITS. THE CONSULTANT PERSPECTIVE – INNES HOOD

The Rationale

- Save money, reduce energy bills.
- Maintain reliability and aesthetics of facilities. Lighting is a significant consideration in making venues attractive places to be.
- Achieve tangible environmental benefits. Reduce consumption of electricity and natural gas. Lower greenhouse gas emissions. Demonstrate wider aspects of Corporate Social Responsibility.

The Process

- ISO 50001, "Plan, Do, Check, Act" management system approach.
- Billing analysis. Identifying the baseline, having a point in time to measure from.
- Onsite review of energy using systems such as HVAC, lighting, appliances, IT etc.
- Develop energy balance. What's the amount of energy used per system?
- Identify & analyse potential energy conservation measures (ECMs).
- Develop a business case for single or multiple ECMs.



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- Implement the upgrades.
- Measurement and verification. Check that the upgrades are delivering the forecast savings.
- Review and repeat when undertaking major facility upgrades or every three-five years.

The Sources of Savings

- Lighting.
- Mechanical.
- Plug Loads.
- Electrical.
- Building Envelope. Buildings that leak too much air in or out may be a source of higher consumption and bills.

ENERGY AUDITS. THE CLIENT PERSPECTIVE. - MICHAEL URBAS

Uses

- Read the audit and develop a draft project list.
- The audit is not just for energy managers. There are \$\$ savings to be explored. The report content can also help facility managers develop more considered renovation projects.

Choosing a Conservation Project

- What energy savings are possible (Electricity, Natural Gas)?
- Costs.
 - Retrofit, replace. Consider the benefits and challenges of each option.
 - Investigate incentives from energy suppliers. What financial support may be on offer from energy suppliers for installing energy efficient solutions?
- Finance and the business case.
 - o Simple pay back.
 - o Net present value.
 - o Internal rate of return.
 - Select the most appropriate format for the project and the budget approval authority.
- Selling the project.
 - Understand the wider business priorities. How will the proposed project compliment wider corporate priorities?
 - Identify your allies. Who needs to be on-side to move the project from concept to implementation?
 - Gain senior management support.
 - o Do not underestimate the importance of human behaviour/factors.

