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A PHASED APPROACH TO INVESTING IN **HOTEL ENVIRONMENTAL PERFORMANCE**

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Hoteliers can consider a phased approach to investing in environmental initiatives to ensure that these investments conform to ownership goals, minimize financial exposure, and optimize returns.

Introduction

There are numerous investments that hoteliers can make relating to improved environmental performance. When considering these investments amongst a broader range of operational and capital costs required to maintain a competitive hospitality property, a phased approach can be utilized to minimize financial exposure and owner risk. This article outlines a recommended process for the identification and scoping of environmental issues at hospitality assets and the establishment of a phased investment approach that balances ownership goals and environmental objectives.

The Basis for Environmental Investment

There are multiple reasons to consider investment into equipment upgrades, employee training, and other areas relative to environmental performance. Suboptimal performance of HVAC and MEP equipment can not only be costly but also adversely impact guest experience. Rising utility rates and scarcity of electricity and water supply in some locations will impact operating budgets and profitability over the foreseeable future.

Regulatory activities will likely mandate certain types of environmental retrofits and sustainability reporting requirements in the future. In some cases, specific equipment upgrades or enhanced operational practices are required (or will be required in the future) for compliance with brand standards.

Additionally, properties with sound environmental management principles also have a gradually increasing competitive advantage in terms of attracting convention and meeting visitation, as well as corporate and government travel.

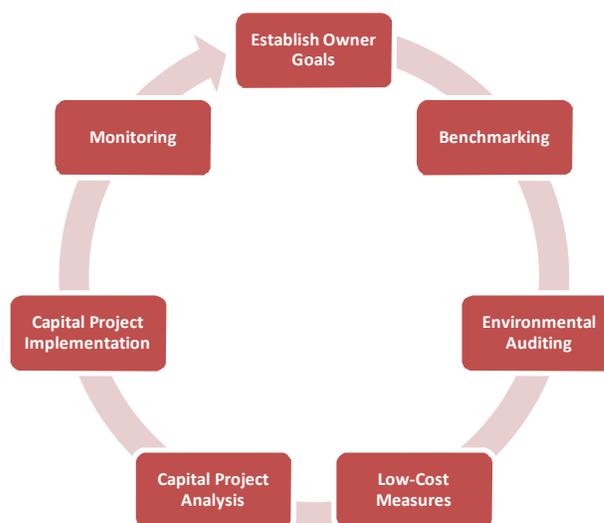
A Phased Approach

HVS recommends that hoteliers consider a phased approach to environmental investment – whereby upfront soft costs are minimized until specific equipment or operational issues are clearly identified and potential returns are defined and quantified.

The phased approach includes: 1) Establishment of Owner Goals; 2) Benchmarking; 3) Environmental Auditing; 4) Low-Cost Implementation; 5) Analysis of Capital Projects; and 5) Implementation of Capital Projects. The level of investment required generally increases from phase to phase. Subsequent to implementation of any of these activities, monitoring is essential to ensure that the facility performs according to expectations over the life of the investment.

Figure 1 below provides an outline of the investment process, and the individual phases are described in further detail on the following pages.

FIGURE 1, PHASING OF ENVIRONMENTAL INVESTMENTS



Establish Owner Goals. This important initial activity has virtually no cost, yet is often overlooked in the environmental process. Hotel owners should clearly identify and prioritize their general investment goals for the property and any specific objectives relating to environmental management. These goals can then be used to establish an environmental plan that directly address owner priorities and budgetary requirements. The goals and objectives should be specific and targeted, such as “reduce operating expenditures relating to utility consumption,” or “comply with brand standards,” or “respond to guest complaints relating to thermal comfort,” and so on.

Benchmarking. Subsequent to identification of ownership goals, benchmarking can provide a relatively low-cost mechanism to indicate the potential for improved environmental performance. Benchmarking is the comparison of certain metrics of a property’s operations across other hotels with similar physical and operational attributes. Relative to environmental management, benchmarking can be used to provide an initial indication of the potential to optimize utility efficiency and reduce operational costs (based on the performance of comparable properties).

The benchmarking process requires access to reliable data that is relevant to the subject property. For example, energy consumption data from a property located in a tropical climate will not be directly transferrable to a hotel located in a temperate climate zone. Benchmarking data must therefore be normalized to account for climatic differences, seasonal weather variations, and differences in types of hotel properties (for example, the presence of an onsite laundry facility or large areas of public space will likely increase energy intensity beyond that of a property without these features).

Several major hotel brands and management companies have launched in-house benchmarking initiatives to gauge performance across their portfolio of properties. Benchmarking data is also available from governments (e.g. the Energy Star program in the United States), international organizations, and private consultancies.

Environmental Auditing. Detailed environmental audits completed by a qualified evaluator have significant potential to reveal operational inefficiencies and potential areas for improved performance. Facility audits generally consist of the collection of background information (e.g. utility statements, systems manuals, as-built drawings, etc.), completion of an onsite inspection, and presentation of findings in a written report. These audits are most appropriately conducted by firms or individuals with significant technical experience in commercial MEP/HVAC operations, ideally in the hospitality sector. The auditing team can also include professionals familiar with solid waste, grounds & maintenance, cleaning, housekeeping, and other operational environmental issues.

Facility audits can be completed at various levels of expenditure to enable owners to control their cash flow. A typical Level 1 audit consists of a brief site visit to reveal no-cost / low-cost measures and immediately recognizable operational deficiencies. This level of audit is also appropriate to gauge the potential for improvement across a portfolio of properties, in order to identify individual assets with the greatest potential for operational improvement and cost savings. A typical Level 2 audit includes a more detailed site inspection and investment-grade calculations for simple equipment retrofits. A typical Level 3 audit consists of detailed engineering modeling and can be conducted as a precursor to investing in major plant equipment.

At any level, a facility audit should result in recommendations for enhanced plant and equipment operations, description of any maintenance issues that require immediate attention, and a prioritized list of more significant capital projects. If a more basic audit is undertaken (i.e. Level 1), the audit report should also provide a summary of the incremental soft costs required to conclude an investment-grade analysis of capital projects. Ideally, all recommendations contained in the audit should also be linked back to basic financials (including a simple break-even scenario and more complex IRR/NPV analysis if beneficial) so the audit itself can serve as a decision making tool by ownership to balance environmental needs with other areas of expenditure.

Low-Cost Implementation. The benchmarking and/or auditing processes will typically reveal a range of low-cost and no-cost measures that can be undertaken (i.e. measures that can be funded within annual operating budgets). These types of measures can include resolution of existing maintenance issues, enhanced operational practices, basic equipment retrofits, and staff training. These measures can typically be accomplished in-house, with periodic need for technical consulting support.

Capital Project Prioritization. The facility auditing process may reveal various environmental upgrade projects – potentially for plant equipment, MEP/HVAC systems, improvements to the building envelope (e.g. windows, doors, insulation, etc.), and other similar projects. These larger capital projects should be categorized and prioritized based on a life-cycle cost analysis (which can be performed as a component of a detailed facility audit, or rolled into the cost of an actual capital project as it is implemented). The life-cycle analysis should document the initial implementation costs and longer-term cost savings provided, factoring in any subsidies or other incentives offered by governments or vendors. Upon completion of this analysis, ownership will have a valuable tool to compare recommended environmental retrofits with the other specific needs of the property to optimize the use of existing operating budgets, maintenance reserves, and working capital.

Capital Project Implementation. Subsequent to evaluation and identification of specific projects to undertake, the typical project procurement process can commence, including finalization of design specifications (if not completed under the auditing process), pre-construction activities (scheduling, preparation of bid specifications), bidding, and implementation. These activities can be consolidated into a design/build approach as well, which is oftentimes provided by vendors of HVAC equipment. If ownership elects to undertake these large projects, consideration should be given to phasing these retrofits during planned facility renovations – to minimize guest impact and to realize efficiencies in the mobilization of equipment and construction personnel.

Monitoring. As with any investment, careful monitoring is advisable to ensure that the technology (or operational process) is providing a return according to initial expectations. Monitoring can be accomplished via detailed review of monthly utility statements, or more preferably, in real time via analysis of utility consumption rates (using meters and submeters). Real-time monitoring is advantageous because it provides for the immediate identification and resolution of excess consumption (e.g. leaks in plumbing, spikes in electrical consumption due to equipment scheduling issues, etc).

Implementation of the Phased Approach

The phased implementation approach described in this article will most likely result in two categories of potential enhancements for a particular asset, including: 1) simple operational measures that can be accomplished using little to no working capital; and 2) technical upgrades to plant, HVAC, MEP, lighting, and other equipment that may require additional, more significant investment. It should be noted that the savings realized through implementation of the low-cost and no-cost measures can not only immediately improve bottom-line performance, but could also be reinvested into the property to help defray the level of capital required for mid- to longer-term improvements.

Based on the types of projects identified, a variety of resources exist to help hoteliers implement environmental upgrades. The simple measures referenced above are described in numerous publications, websites, and best practice guides for hospitality that are widely available. More complex, engineering-grade support for larger projects can be obtained from specialized consultancies, MEP engineering firms, and commissioning authorities.

There are most likely gaps in various markets relating to following this approach on a step-by-step basis (e.g. lack of suitable benchmarking data, operational constraints, difficulty in finding qualified consultants, etc); however, this methodology can still be applied to identify investment opportunity and minimize financial exposure throughout the process.



About HVS

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HVS SUSTAINABILITY SERVICES provides a range of business-driven consulting services that enable hospitality firms to identify cost savings opportunities, enhance operational efficiency, and demonstrate a positive commitment to the environment to guests, investors, and other relevant stakeholders. HVS works directly with owners and operators to evaluate the business case for capital investment into environmental technologies. Our core business services include benchmarking, auditing, project implementation support, training, certification, and strategic advisory.

About the Author



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