No Reservations – Hotels See the Benefits of Energy Management Systems

Vestal Tutterow, Lawrence Berkeley National Laboratory
Michael Socks, VEIC
Bunmi Adesola, Lawrence Berkeley National Laboratory

ABSTRACT

According to the American Hotel & Lodging Association, there are over 56,000 hotels in the United States, consuming over 564 tBtu/year. As occupancy rates plunged in 2020 due to COVID-induced limits on business and leisure travel, hotel managers sought ways to control operating costs. Despite low occupancy, many hotels did not see a corresponding reduction in energy consumption and costs. Further, changes made to HVAC systems and controls to improve health and safety warranted attention to minimize adverse energy impacts.

Two leading hotel companies opted to go beyond technical projects and instead implemented holistic energy management systems at key locations. Loews Hotels selected eleven properties to participate as a cohort in the U.S. Department of Energy's 50001 Ready program, and IHG selected their Intercontinental New York Times Square hotel. Based on the ISO 50001 energy management system standard, the 50001 Ready program provides a self-paced, no-cost methodology and supporting tools for organizations to create a structured system for continual energy improvement. The participating IHG and Loews hotels found significant value in having continual improvement processes in place that further their sustainability objectives and help ensure continuity through any future organizational changes. Both organizations plan to implement 50001 Ready across their brands. This paper explores the lessons learned by these two organizations, and makes a business case relevant to others in the hospitality industry as well as other commercial buildings for using the 50001 Ready process to implement energy management systems.

Introduction

The United States (U.S.) Department of Energy (DOE) and Lawrence Berkeley National Laboratory (Berkeley Lab) developed the 50001 Ready program, a self-guided resource to assist facilities and organizations in implementing an energy management system (EnMS) based on the ISO 50001 voluntary global standard that spells out the requirements for developing, establishing, and maintaining an EnMS. While certification to the ISO standard requires third party certification, organizations can be "recognized" by DOE once they have self-attested to implementing an EnMS through the actions detailed in the 50001 Ready program.

Although many sites have independently gone through the 50001 Ready process and been recognized to date, DOE has begun working with partners to create cohort-centered training focused around implementation. These partners provide qualified 50001 Ready coaches (aka trainers). This allows DOE to expand the outreach of EnMS concepts and to leverage limited resources. In addition to increasing awareness of the benefits of implementing an energy management system at commercial and industrial facilities, DOE uses the cohorts as a way to build capacity for skilled coaches. Having a number of partner organizations able to provide training on energy management systems is a step toward developing that capacity, and provides

additional voices for creating awareness throughout a growing cross section of the commercial and industrial sectors.

The first 50001 Ready cohorts launched in late 2020 as a way to bring together multiple organizations or sites for a series of webinar-based training sessions. With funding from DOE's Building Technologies Office, Berkeley Lab launched two cohorts within the hotel and lodging industry – one consisting of eleven Loews Hotels' sites, and another with Intercontinental Hotels Group (IHG) comprised of IHG's InterContinental Times Square hotel, and with staff from IHG's InterContinental Barclay hotel observing. Through a series of online live webinars and one-on-one coaching, multiple sites simultaneously learn the process for implementing an EnMS.

Overview of 50001 Ready

ISO 50001, the global standard for energy management, is designed as a catalyst to change organizational culture regarding use of energy. The standard provides organizations with an internationally recognized framework for integrating an energy management system into existing business practices, enabling them to leverage the power of human behavior to deepen and sustain energy savings. Evidence shows that sites certified to ISO 50001 yield greater energy saving results, but the real and perceived costs and rigor associated with external audits can present barriers to wide-scale implementation (Fuchs, Aghajanzadeh, and Therkelsen 2020).

In 2017, the U.S. Department of Energy and Lawrence Berkeley National Laboratory established the 50001 Ready program as a self-paced, no-cost way to support organizations of all sizes and sectors to build a culture of continual energy improvement. Organizations self-attest to having implemented an energy management system using the 50001 Ready program guidance within the 50001 Ready Navigator, a free online software tool that supports users in establishing an EnMS. The 50001 Ready Navigator contains a variety of resources to guide users through each of the 25 tasks and allows users to track progress toward the completion of each task. A key component of the 50001 Ready Navigator is the 50001 Ready Navigator Playbook, a comprehensive set of 25 worksheets (one for each task) that prompts users on the decisions and actions needed to progress through the tasks in an organized manner. Though optional, the Playbook worksheets serve as an accessible method of documenting the EnMS.

Organizations completing 50001 Ready receive public recognition from DOE. The 50001 Ready cohort framework allows DOE to leverage its resources to reach a larger audience of commercial and industrial organizations and facilities.

As of February 2022, Berkeley Lab is working with sixteen cohorts that consist of 191 sites among 57 different organizations. These cohorts can consist of groups of multiple sites from within one organization or agency, or can consist of multiple organizations. In addition to the cohorts examined in this paper, examples of cohorts include sites from correctional institutions across the U.S., the Federal Aviation Administration, federal facilities across the Pacific Rim, Ford Motor Company, and others. Two cohorts are from the hotels and lodging industry.

Energy Consumption in the Hospitality Sector

In 2018, the U.S. hotel industry directly employed 2.3 million people and supported an additional 6 million jobs. The combined total of 8.3 million represented 4% of all U.S. jobs. That

same year, the industry encompassed nearly 56,000 individual properties with 5.3 million total guestrooms. Financial impacts included $1.2 trillion in business sales and $395 billion in wages, salaries, and other compensation (Dobrosielski 2019). In total, the hotel industry accounted for $659 billion in gross domestic product, or 3.2% of the overall U.S. GDP (BEA 2019).

The U.S. hotels & lodging industry consumes around 564 tBtu/year, primarily in the forms of electricity and natural gas. This breaks out to around 14 kilowatt-hours (kWh) of electricity and 49 cubic feet of natural gas per square foot of floor space annually (OUC 2020). Average annual energy costs are around $2,200 per guest room (Lodging Magazine 2018). The primary consumers of electricity include cooling, ventilation, refrigeration, lighting and office equipment. Natural gas is used for water and space heating, as well as for cooking.

The on-going coronavirus pandemic has led to better awareness of the need for improved indoor air quality and new health and safety protocols for ventilation and air filtration. Hotels are responding with increased outdoor air rates for their ventilations systems and more robust air filtration. The American Society for Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) Epidemic Task Force, for example, recommends air filters with a minimum rating of MERV 13 (ASHRAE 2021). Increasing ventilation and filtration both negatively impact energy consumption. Hotels seeking to improve energy performance and reduce carbon emissions need to factor these changes into any energy and carbon-related goals and objectives.

Early in the pandemic, Covid-related travel restrictions caused a dramatic reduction in guest stays, food and beverage receipts, and event revenue across the hospitality sector (Figure 1). As a result, hotel staffing levels were reduced and the remaining staff were often required to take on additional responsibilities. As travel restrictions were eased, new health and safety protocols had to be implemented but market uncertainty and a tight labor market prevented the hotels from immediately staffing to pre-Covid levels placing a premium on staff time, including engineering staff responsible for operating and maintaining energy-consuming equipment and systems.

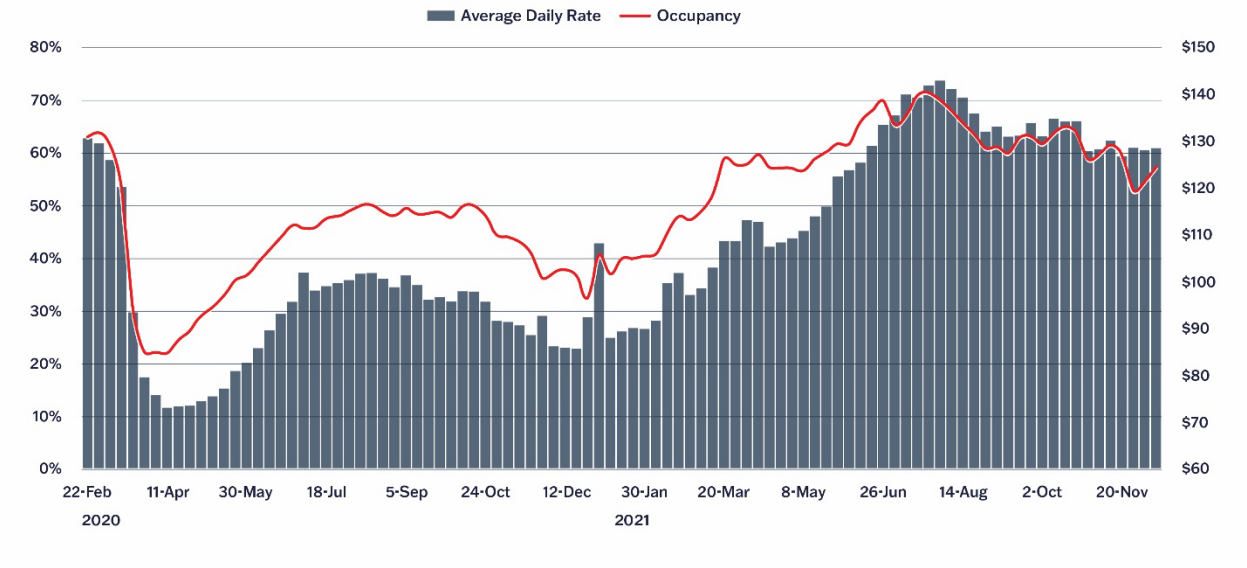

Figure 1. U.S. hotel occupancy (%) and average daily rate ($/room) (2/2020 to 12/2021). *Source*: STR 2021.

Hotels and Lodging Cohorts

Loews Hotels was founded in 1960 and currently owns or operates 26 luxury hotels in major cities and resort destinations across North America. Loews Hotels has a long history of commitment to environmental stewardship, including participation in the US DOE's Better Buildings Challenge, US EPA's ENERGY STAR program, and the Green Meetings Industry Council, among others. Each hotel maintains a "Green Team" composed of employees who advise on and implement best practices related to the company's Green Policy, including their participation in the initiatives above. Loews Hotels' Vice President of Engineering engaged with the 50001 Ready program to follow up on their successful completion of the Better Buildings Challenge in 2020 (>20% reduction in energy intensity across a 12.5 million square foot property portfolio).

Throughout the 50001 Ready cohort program Loews headquarters (HQ) was represented by the Vice President of Engineering and Assistant Area Director of Property Engineering Operations for Loews Hotels' four Orlando properties, two of which participated in the cohort. HQ staff recruited 11 participating properties as a pilot to learn about 50001 Ready and set the stage for 50001 Ready recognition across all Loews Hotels owned and managed properties. The participants included a diverse mix of old and new properties and more and less experienced Directors of Engineering who led on-site implementation. As a single company multi-site cohort, Loews HQ staff were also consulted for guidance on training content and delivery. HQ staff worked with the coaches to draft 50001 Ready Playbook content relevant to all participating Loews sites and provided guidance for sites to customize for their specific site conditions.

The cohort training kicked off with an introductory call with the Directors of Engineering for the participating hotels in November 2020. The training content was divided into 7 monthly training modules commencing in January 2021. The training module themes and content are outlined in Table 1. Ultimately, all eleven sites completed the 25 tasks and achieved 50001 Ready recognition in December 2021.

Each training module included a structured group training session followed two weeks later by individual coaching calls with each hotel's implementation team. Group sessions provided 50001 Ready task descriptions, guidance on implementation, playbook examples, and demonstration of implementation tools. Participants were invited to present homework examples or share successful strategies with their colleagues. Homework was assigned after each training session, including completion of individual and site surveys, collection of energy and related data, and the drafting of task playbooks or related exercises. Individual coaching calls were used to check on progress, answer any questions on the training content, address individual challenges faced by the hotel teams, and help with the assigned homework.

Table 1. 50001 Ready training module outline (Loews Hotels example)

Session	Training themes	Training content
1	Get Started	50001 Ready Overview 50001 Ready Navigator 50001 Ready Task Playbooks
2	Establish Support, Build Your Team, Define Your Mission	Tasks 1, 2, 3, 4, 5, 6, 7
3	Track Your Energy Consumption, Identify & Manage Your Energy Projects	Tasks 8, 9, 10, 13, 17
4	Choose Your Measuring Stick & Set the Bar	Task 11, 12, 21 Energy Footprint Tool EnPI Lite Tool
5	Get Everyone on Board	Tasks 14, 15, 18, 19
6	Dot Your I's & Cross Your T's, Tell Your Story	Tasks 16, 20, 22, 23, 24
7	Continual Improvement, Start Again	Task 25 Task 1-24 Review 50001 Ready recognition

InterContinental Hotels Group (IHG) is an international hotel company encompassing nearly 6,000 hotels in over 100 countries marketed under 16 brands. IHG designed their cohort to include a single pilot hotel to implement 50001 Ready with IHG HQ staff providing guidance as well as learning the material. Participants included HQ staff representing corporate sustainability and hotel operations support, along with the Director of Engineering for the InterContinental Times Square hotel in New York City who would lead the implementation. The Hotel Manager for InterContinental New York Barclay also attended the training as an observer. The IHG cohort training followed the same themes and outline as Loews, with the exception that content was delivered over two shorter calls per month (Sessions 1.1, 1.2, 2.1, 2.2 etc.) rather than one longer monthly session. Training commenced in January 2021 and completed in July 2021. The InterContinental Times Square completed the 25 tasks and received 50001 Ready recognition in March of 2022.

Figure 2 shows the locations of the participating properties.

Figure 2. U.S. map showing Loews and IHG 50001 Ready sites

Based on the combined experiences of Loews Hotels and IHG, the following lessons learned are offered for any hotel brand interested in implementing a formal energy management system within their operations.

- **Energy management must address identified needs of the organization**. For a single company, multi-site operation such as a hotel brand, HQ or central office staff should articulate the reasons for implementing a structured energy management system and clearly establish the desired outcomes. For hotels, these outcomes frequently include reduced operating costs/greater profitability, reduced energy consumption or energy-related carbon emissions, improved health and safety of guests and staff, fewer comfort complaints, and brand-wide recognition as a good environmental steward. With universal agreement on the benefits of energy management, there can be further agreement that the effort is worthwhile. And while implementing an energy management system will initially require additional time and effort, a well-designed strategy incorporates energy management activities into normal business operations. Both Loews Hotels and IHG clearly understood the benefits of energy management before initiating their 50001 Ready cohorts as indicated by their past energy efficiency-related achievements.

- **Central office or headquarters-level participation and support is critical to site-level progress and success**. A new initiative, such as implementing a formal energy management system, can easily become a low priority for a busy site leader. For both Loews and IHG, 50001 Ready implementation (and not just session attendance) was reinforced by HQ from the beginning. Loews HQ's goal that all participating sites

achieve 50001 Ready recognition within the calendar year became personal performance goals for the site leaders. HQ staff also contributed to the training sessions, provided templates and guidance for tasks from the central office perspective, and helped sites address staffing challenges. This demonstrated that 50001 Ready was a priority, and that HQ was willing to do their part. For IHG, HQ staff attended all trainings and were integral members of the InterContinental Times Square implementation team throughout and viewed their participation as a "train-the-trainer" activity so they can become internal coaches for staff at other properties.

- **Energy management system structure and implementation materials should be standardized prior to engaging individual sites**. The organization's HQ or central office staff should lay a strong foundation for energy management. This can include setting implementation goals, standardizing implementation materials, customizing 50001 Ready training materials, and training delivery by HQ or central office staff well versed in energy management principles with or without the assistance of a third-party coach. In the instance that a cohort training is delivered, HQ preparation can precede each month's training or be completed in its entirety before launch. Regardless, 50001 Ready playbooks and other materials should be drafted by or with input from HQ and provided to the implementing sites as templates at the first introduction. This prevents sites from reinventing the wheel or implementing tasks in an inconsistent way, thus reducing implementation effort and providing a better outcome. In the case of Loews, only generic materials were provided to 11 sites at the outset and some inefficiency occurred. To standardize, Loews designated a team of highly motivated participants as internal champions who consolidated the 25 playbook documents into a partially filled-in, branded spreadsheet-based playbook template, standardized file locations within Loews' intranet to foster sharing and collaboration, and served as in-house mentors. These developments simplified the implementation process for the other sites significantly. In the case of IHG, the cohort included only one property and IHG HQ staff as a combined energy team, streamlining implementation for the site. Future IHG sites will now benefit from a fully implemented, IHG-specific energy management roadmap.

- **The scope and timeline of 50001 Ready implementation must consider the availability of staff time and resources**. The hotel site implementation teams were stretched very thin by the pandemic. For Loews, group training sessions were shortened from 2 hours per month to 90 minutes. Initially, an additional monthly group "Office Hours" call was envisioned as part of the cohort delivery to encourage sharing and collaboration, however this was replaced by off-line sharing of examples and templates or incorporated into the training sessions to ease time and scheduling constraints. Homework assignments were simplified and mentoring between well-staffed and less-staffed sites became a point of emphasis. While the group training sessions concluded on schedule in July 2021, cohort engagement and coaching support were extended into October to provide more time for task completion. For IHG, as noted above, training session content was divided into separate 1-hour calls occurring twice per month as a single longer call was deemed too time intensive and difficult to schedule. Although a global pandemic represents an extreme challenge, management must ensure individual

hotels have the necessary resources and support and set a timeframe that allows sites to successfully undertake persistent energy management despite competing priorities.

The Case for Energy Management in the Hotels & Lodging Sector

With familiar challenges such as continual guest turnover and event setup and unforeseen challenges such as those presented by the pandemic, hotels and lodging establishments clearly operate in a dynamic environment. If tactfully implemented (by considering the lessons learned by Loews and IHG noted above), the cohort training has shown that a structured energy management system implemented according to 50001 Ready guidance can provide solutions to many of the challenges hotels face. The following list encompasses common issues for the sector and how energy management can address them.

- **Protecting health and safety**. The pandemic brought renewed focus to indoor air quality in commercial buildings including hotels. Updated guidelines include higher outside air ventilation rates and higher efficiency air filtration. The additional heating and cooling required for the increased outside air flow results in increased electricity needs for air conditioning and humidity control and fuel consumption for space heating. Further, high performance filtration results in greater system pressure drop and an increase in fan energy consumption. Health and safety are of primary importance, so some level of energy penalty is unavoidable for these measures. Effective energy management, however, applies operational control to assure health and safety guidelines are met while any additional energy consumption is minimized.
- **Ensuring comfort**. Hotel guests expect to be comfortable during their stay, and tight control of room temperature and humidity and the on-demand availability of hot water are strong contributors to their comfort. Energy management encompasses appropriate building envelope, HVAC, and hot water system design, maintenance, and control that delivers both energy efficiency and improved comfort under all operating scenarios. This results in fewer guest complaints and higher satisfaction. Additionally, studies have shown that employee comfort is a strong contributor to their productivity and these productivity gains often have a higher dollar value than the energy cost savings (Haynes 2008).
- **Controlling operating costs**. Businesses operate with numerous line-item expenses in their budgets, and it is useful to differentiate controllable and non-controllable costs. Examples of non-controllable costs include rent and insurance where, once a contract is signed, the expected payment is unchanged. Controllable costs, on the other hand, are those over which a company has full authority to make changes. These include examples like marketing and labor, at least to the extent that a business is willing to alter their workforce. Energy costs are often viewed as a non-controllable “cost of doing business”, whereas experience has shown that a strong commitment to energy management can put energy costs firmly in the controllable category and in fact represents one of the most painless ways to control operating costs overall.
- **Developing workforce**. The pandemic presented many labor challenges for hotel operators. Fewer hotel guests and associated revenue forced hotels to reduce meal service, housekeeping, and maintenance staff. As hotel occupancy recovered later in the pandemic a very tight labor market prevented operators from returning to pre-pandemic

staffing levels and many hires were new staff unfamiliar with existing policies and procedures. Energy management addresses workforce competency, ongoing training, staff communication, and operational controls such that energy-related knowledge is readily transferred between current staff and during onboarding of new staff. The pandemic made hotel operators acutely aware of the importance of a strong workforce, and a well-planned and executed energy management strategy ensures staff are engaged and capable of helping the organization meet its energy goals as part of their daily responsibilities and not as a burdensome "extra" duty. Engaging staff to "do good", such as through the Green Teams at Loews Hotels, can also increase job satisfaction and thus reduce turnover.

- **Reducing carbon emissions**. Addressing global climate change and doing their part to avoid the worst consequences is a necessary factor in the near- and long-term planning for most organizations, and hotels are no exception. The vast majority of the carbon emissions associated with hotel management are due to energy consumption, either on-site, at the utility plant, or within the products or services acquired through the hotel's supply chain. Therefore, energy management is the ideal tool to reduce the carbon footprint of an organization's operations. Many hotels, including Loews Hotels and IHG, view energy management as the primary means to meet their carbon reduction goals in the years ahead.
- **Maintaining profitability**. Ultimately, hotels must be profitable to stay in business. In simple terms profit results when revenue exceeds expenses, and energy management can contribute to both increasing revenue and decreasing expenses. As noted above, energy management can reduce energy costs resulting in savings that go right to the bottom line. On the revenue side, effective marketing around meeting energy management and associated carbon emission goals can help a hotel brand distinguish itself in a crowded marketplace. Public recognition for energy-related achievements, such as becoming ISO 50001 certified or becoming 50001 Ready recognized, can help a business attract and retain clientele.

The list of issues above is presented from the perspective of hotel operators. A closer look, however, reveals that these issues are the same for most any commercial business. When an initiative demonstrably contributes to the key needs of an organization and a clear roadmap for implementation is readily available, there is a strong case for undertaking a strategic effort to implement a best practices energy management system within their operations.

Summary and Conclusions

IHG and Loews Hotels opted to participate in the U.S. Department of Energy-provided 50001 Ready training as a means to facilitate the implementation of energy management systems at a number of their properties. IHG's InterContinental Times Square hotel and each participating Loews property received recognition for completing the 25 tasks that comprise the 50001 Ready process. The participants began cohort training in early 2021 during a time of low hotel occupancy due the COVID-19 pandemic. As occupancy rates at the properties increased, the properties were not able to hire new staff, requiring most of the participants to take on additional responsibilities. Despite the increased workloads, the participants, seeing the value of implementing an EnMS, continued with the training webinars, one-on-one coaching sessions,

and homework assignments that led to completion of the 50001 Ready tasks and implementation of their EnMS. Supportive corporate-level leadership was instrumental in each step of the process.

In the case of Loews Hotels, both the corporate and property-level participants saw value in both the training sessions and having implemented an EnMS. Even though both Loews Hotels and IHG have been active in ENERGY STAR and other energy efficiency-related programs for years, personnel from both hotel brands stated that even though energy performance improvement has long been a corporate priority, putting an EnMS in place at their properties takes their organizations' commitment to a "whole new level". The Loews' Directors of Engineering for the participating properties also see value in having a set of "living documents" for their EnMS that allow new engineering staff to quickly get up to speed on significant energy uses, objectives, targets, preventative maintenance procedures, and other aspects impacting energy performance.

Insights and outcomes from the DOE and Berkeley Lab perspectives from these (as well as other concurrent) cohorts include:

- Having sector-specific and enterprise-specific cohorts such as these allow DOE and Berkeley Lab to better understand the needs of these organizations. For example, Berkeley Lab has developed a set of example playbooks and task-by-task guidance tailored to the hotels and lodging sector. These resources will benefit any hotel and lodging property that may undertake 50001 Ready in the future, whether as part of a cohort or individually.
- Allowing participants to tailor resources to best fit their needs encourages deeper engagement and can spark innovative solutions. For example, the Director of Engineering for one Loews Hotels property adapted the twenty-five 50001 Ready Playbooks into spreadsheet format, with each Playbook on a separate worksheet. Loews' corporate staff then partially completed each worksheet in areas having common inputs across their properties, such as energy policy, training, and procurement criteria. When uploaded to Loews' internal shared drive folders for each property, the Directors of Engineering were able to use a familiar tool when progressing through each task. In addition, corporate engineering staff were able to easily track progress using established methods and tools.
- Berkeley Lab has begun to include enterprise-level support for single organization cohorts. This aids organization HQ or central office staff in learning and adapting 50001 Ready for their specific circumstances coincident with or in advance of site-level engagement. The enterprise-specific cohort approach can cultivate improved collaboration among geographically diverse sites, sharing knowledge and lessons learned, and prepare the organization to support 50001 Ready recognition at all of their sites.
- A motivation for these organizations to implement an EnMS is to meet internal sustainability goals and objectives, such as reducing greenhouse gas emissions. DOE and Berkeley Lab are currently working to integrate information on how to best minimize energy-related emissions as new 50001 Ready resources are developed and existing resources are updated.

In conclusion, the DOE's 50001 Ready cohort training demonstrated its value to Loews Hotels and IHG. The successful implementation of a formal EnMS at the participating sites will

provide clear benefits for years to come, and has established a path for additional property managers to follow. Further, DOE continues to improve the 50001 Ready resources and training in response to the lessons learned from these and other cohorts. If Loews Hotels and IHG can successfully implement 50001 Ready during a pandemic with its associated strain on staff time and resources, implementing an energy management system during less trying times can be a straightforward task for a hospitality (or any other) business, with no reservations.

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References

ASHRAE (American Society of Heating, Refrigerating, and Air-Conditioning Engineers). 2021. *Core Recommendations for Reducing Airborne Infectious Aerosol Exposure*. October 19, 2021. https://www.ashrae.org/technical-resources/resources.

BEA (Bureau of Economic Analysis). 2019. "Gross Domestic Product, 4th quarter and annual 2018 (third estimate); Corporate Profits, 4th quarter and annual 2018." March 28, 2019. https://www.bea.gov/news/2019/gross-domestic-product-4th-quarter-and-annual-2018-third-estimate-corporate-profits-4th.

Dobrosielski, C. 2019. "Hotel industry accounts for more than 1 in 25 U.S. jobs." Hotel Management. September 9, 2019. https://www.hotelmanagement.net/human-resources/hotel-industry-accounts-for-more-than-1-25-u-s-jobs

Fuchs, H., A. Aghajanzadeh, and P. Therkelsen. 2020. "Identification of drivers, benefits, and challenges of ISO 50001 through case study content analysis." Energy Policy 142. https://www.sciencedirect.com/science/article/pii/S0301421520301968?via%3Dihub.

Haynes, B. 2008. "The impact of office comfort on productivity." *Journal of Facilities Management*. 6(1):37-51. https://www.researchgate.net/publication/241700799_The_impact_of_office_comfort_on_productivity.

Lodging Magazine. 2018. "Here's Where Hotels Spend the Most on Energy." April 24, 2018. https://lodgingmagazine.com/where-hotels-spend-most-energy/.

OUC (Orlando Utilities Commission). 2020. "Hotels and Motels." February 19, 2020. https://ouc.bizenergyadvisor.com/article/hotels-and-motels.

STR. 2021. "U.S. hotel results for week ending 11 December." December 16, 2021. https://str.com/press-release/str-us-hotel-results-week-ending-11-december.