



# Start Leading the Way for Global Sustainability

# Are you ready?



This playbook serves as a comprehensive guide to help you navigate your university's journey towards achieving ambitious climate impact goals, while also ensuring compliance with evolving regulations and embracing sustainability initiatives.

It explores the complexities and challenges faced by higher education campuses in reducing emissions, modernizing systems, and setting an example for sustainability. The playbook emphasizes the importance of data-driven decision-making and the adoption of appropriate technologies to support these goals.

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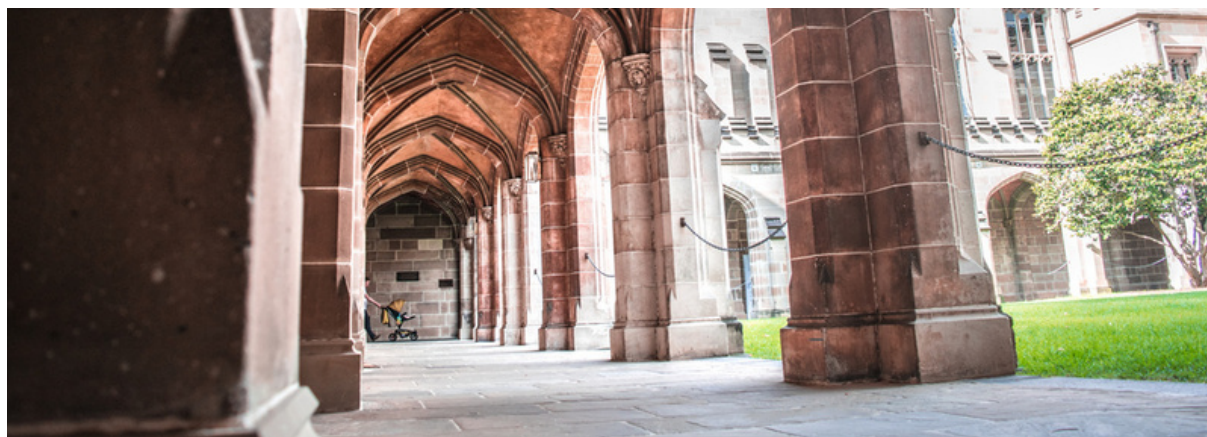


## Assessing Current State

It is crucial for higher education institutions to conduct a thorough evaluation of their existing building portfolio. This evaluation should consider various factors, such as the age of the buildings, the presence of legacy systems, and the potential for incorporating technological advancements. By assessing the age and condition of the buildings, institutions can identify areas that require upgrades or retrofitting to improve energy efficiency and sustainability. Additionally, evaluating the compatibility of legacy systems with modern sustainability practices enables institutions to determine the extent of system upgrades or replacements needed.

## Financial Analysis

Conduct a financial analysis of the proposed energy management solutions, including cost estimation, return on investment (ROI), payback periods, and available funding sources (grants, rebates, partnerships). Consider long-term operational and maintenance costs in addition to upfront investments.



# Energy Management Strategies

Consider a range of strategies and technologies that can be employed to achieve the sustainability goals. This may include energy-efficient lighting, HVAC system upgrades, building automation systems, renewable energy installations (solar, wind, geothermal), and demand response programs. Consider the cost/benefits of each strategy, including savings potential, implementation timelines, and any relevant case studies or best practices that can guide you in your decision making.



## Stakeholder Buy-In

To ensure a coordinated and collaborative approach, it is essential to identify and involve relevant departmental stakeholders.

This includes representatives from departments such as campus management,

sustainability, energy management, engineering, finance, and administration. By establishing a consortium or task force consisting of these stakeholders, institutions can foster a unified effort to drive the sustainability initiative. Through this consortium, ideas, expertise, and resources are shared to enable effective decision-making and sustainable measures to be implemented while taking into account multiple priorities.

# Start with the End in Mind

To provide clarity and direction, it is key to determine specific goals and desired outcomes for the sustainability initiative. These goals should be well-defined, measurable, and aligned with broader sustainability and regulatory frameworks. By setting ambitious yet attainable targets, such as reducing carbon emissions, improving energy efficiency, increasing renewable energy usage, and reducing water consumption, institutions can focus their efforts on meaningful sustainability outcomes. Moreover, considering the broader impact of these goals, such as their influence on local communities and potential leadership in sustainable practices, helps shape a comprehensive and impactful sustainability strategy. Setting specific goals is essential not only for guiding sustainability efforts but also for tracking progress and facilitating accurate reporting on the institution's advancements.

You can't manage what you don't measure, so ensuring you have the right technology in place to benchmark where you are today and where you want to get to, is critical.

# Defining Priorities

To initiate the transformation process effectively, it is recommended to focus on one or two desired outcomes. By narrowing down the scope, institutions can direct their efforts towards specific areas that will have a significant impact on sustainability. This targeted approach allows for concentrated resources and attention, increasing the likelihood of successful outcomes.

Among the areas of focus, a key priority should be given to the modernization of the energy management system (EMS). Upgrading the EMS offers several benefits, including improving data quality, enhancing automated reporting capabilities, and enabling accurate benchmarking of energy consumption. By implementing an advanced EMS, institutions can gather more accurate and reliable data, which serves as the foundation for informed decision-making and effective energy management strategies. Additionally, the automated reporting capabilities of a modern EMS streamline the process of monitoring and analyzing energy consumption, enabling institutions to identify areas for improvement and measure progress towards sustainability goals.

By prioritizing the modernization of the energy management system, higher education institutions can lay a strong foundation for their sustainability initiatives. This focused approach ensures improved data accuracy, streamlined reporting processes, and the ability to benchmark consumption, all of which are essential for making informed decisions and tracking progress towards sustainable outcomes.

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## Continuous Improvement

Emphasize the iterative nature of energy management and sustainability efforts. Encourage periodic review and reassessment of goals, strategies, and technologies to ensure they align with evolving sustainability standards and industry advancements.

## Building System Data Integration

When embarking on the sustainability journey, it is crucial to acknowledge the complexity and volume of systems present on the campus while proactively addressing potential roadblocks. By recognizing these challenges, institutions can effectively strategize and overcome obstacles to ensure a successful transformation process.

## Education and Awareness

Highlight the importance of education and awareness programs to engage the university community and promote sustainable behaviours. Include suggestions for workshops, training sessions, campaigns, and incentives to encourage energy conservation and sustainability practices.





# Energy Management System Assessment

If an EMS is not already in place, institutions should prioritize its implementation to streamline energy management and data collection processes. This system serves as a central hub for integrating and analyzing data, providing valuable insights into energy consumption patterns and identifying areas for improvement.

To facilitate the smooth integration of building system data, developing a comprehensive change management plan is essential. This plan outlines the steps, timelines, and communication strategies required to ensure seamless adoption of new processes and systems. It aims to minimize disruptions and engage stakeholders effectively throughout the integration process.

Implementing a phased approach is also advisable. Starting with meter data analysis allows institutions to address data quality issues and enables accurate tenant billing. This initial phase provides valuable insights into consumption patterns and establishes a foundation for future integration efforts.

Leveraging consumption analysis from benchmarking initiatives can inform site selection for more detailed integration, such as HVAC system data. By identifying areas of high energy usage, institutions can prioritize retrofit projects and make informed decisions about allocating capital funding for sustainable upgrades.

**Energy Audit and Benchmarking:** Conduct a thorough energy audit of the university's facilities to identify areas of high energy consumption and potential inefficiencies. Benchmark the current energy performance against industry standards or similar institutions to establish a baseline for improvement.

# Leveraging Technology Partners

When seeking support for building system technologies, it is crucial to consider partnering with specialized technology providers such as Buildings IOT. By collaborating with a trusted partner, institutions can tap into their expertise in building data management and harness the power of data to meet the needs of various stakeholders.



relevant to different stakeholders.

Choosing a partner with a deep understanding of building data and its practical applications is essential. Such a partner should possess the ability to transform raw data into actionable insights that can drive informed decision-making. By leveraging their expertise, institutions can ensure that the data collected from building systems is not only comprehensive but also useful and

To optimize the benefits of technological advancements, institutions should leverage innovative solutions provided by their chosen partner. These solutions can include validating meter data to ensure accuracy, automating workflows to streamline operations, managing diverse and disparate equipment through a centralized interface, and gaining unified control over distributed assets. By embracing these technologies, institutions can enhance operational efficiency, save energy, and improve sustainability outcomes.

# Monitoring and Reporting

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Select a platform that provides ongoing monitoring and evaluation of energy performance and actionable insights to drive increased savings via enhanced operational management – increasing equipment lifecycle. Define key performance indicators (KPIs) to track progress towards sustainability goals. Establish regular reporting mechanisms to inform stakeholders about achievements, challenges, and adjustments needed.

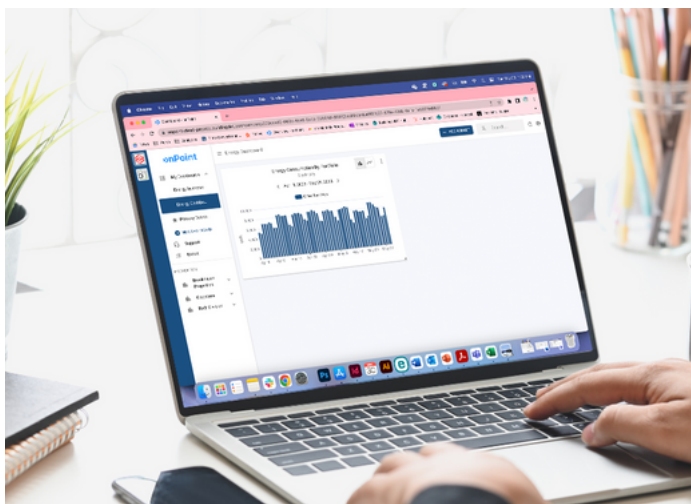
# Let's get started...

By following this playbook, you can take a systematic approach to achieving your sustainability goals, future-proofing your campus, and setting an example for global sustainability. Through prioritizing energy management system modernization, phased building system data integration, change management, and collaboration, your institution can leverage technology solutions to automate processes, save energy, and drive sustainable practices across your campuses. By partnering with experienced technology providers like Buildings IOT, you can accelerate your sustainability transformation, create a positive impact on the environment, and ensure that your campus remains resilient and adaptable to future challenges.





# About Buildings IOT



## We are building system experts.

At Buildings IOT, we're changing the way the built environment understands, reacts and adapts through technology. Our software and services increase the longevity of building assets, improve the comfort of building occupants and help building owners achieve greater efficiency across North America, Europe, and APAC.

We develop and deploy cloud-based building analytics software, we implement complex

Integrated Building Management Systems, we design and install controls systems, we maintain building assets and we provide IT managed services.

We excel at all of our efforts because we know buildings.

## Ready to take your campus to **the next level?**

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