


A photograph of a row of industrial electrical control panels. The panels are grey and black, with various gauges, switches, and digital displays. One panel on the right has a screen showing a control interface. The panels are labeled "Power Generation" and "Digital MasterControl".

MONETIZE YOUR ENERGY ASSETS:

New Innovative Path to Fund Deferred Maintenance,
Improve Utility Infrastructure, Enhance Student Comfort,
and Reduce Campus Risk



Today's higher education institutions are being squeezed financially like never before. Several critical factors are adding to the pressure — most notably, deferred maintenance. Deferred maintenance and aging infrastructure is a challenge on almost every campus. Facilities professionals know that the more they take care of the infrastructure, the longer it will last. Administrators know that aging systems negatively impact student experience and the university's long-term reputation. But the funds are too often hard to come by and get re-allocated to various other initiatives.

To mitigate this challenge, many higher education institutions have turned to private-public partnerships (P3). The P3 approach to funding is not new for campuses. But, until now, it's primarily been used successfully to fund revenue-generating projects, such as new residence halls, dining facilities and retail operations. A P3 is best positioned to bring quick and effective change to a campus.

Energy procurement and management programs have long been leveraged as a funding source to address deferred maintenance. Savings from reducing consumption and buying energy more efficiently are routinely redirected to address building needs. They are also used to pay for more efficient equipment, eliminating maintenance backlog items, upgrading infrastructure, and lowering future annual consumption and cost levels. However, for most institutions, the deferred need backlog is too great to be funded solely from energy savings.

Today, innovative higher education institutions have found a third unique way to fund their deferred maintenance and the crumbling distribution systems.

Solution: Monetizing Infrastructure Assets.

Through P3-style relationships, financial/energy organizations lease or buy a campus's utility-generating assets, giving the universities a significant up-front capital, while providing upgrades to energy infrastructure and reduced costs for energy usage.

Infrastructure monetization is a cutting-edge solution that, so far, only a few progressive institutions have explored or implemented. But it's poised to become the next big avenue of funding thanks to the many benefits. This document overviews this revolutionary new approach to funding higher education energy/utilities infrastructure.



INTRODUCING **P3-STYLE ENERGY FINANCING**

Turn your campus assets from a cost center to a revenue stream. Unlock the treasure chest to future growth.

With a new decade upon us, higher education administrators face a continuing facilities and financing quandry: On one hand, higher education institutions are struggling under ever-mounting deferred maintenance projects that, left unaddressed, threaten to bring the system crashing down. On the other hand, maintenance operators are tasked with being more sustainable and reducing the campus's carbon footprint through the installation of innovative and often expensive energy-saving equipment. However, the majority of campuses don't have the funds to meet these needs.

The new approach is directed at a non-revenue-generating cost center. In exchange for investment in the energy assets, the capital provider takes over the management and maintenance of the utility systems. **In the end, campus utility infrastructure, such as heating/cooling plants and distribution systems, which were previously considered expenses, become revenue generators for the campus. This strategy overcomes three key challenges: reducing deferred maintenance backlogs, investing in energy-saving innovation, and securing new funding.**





CAMPUS CHALLENGE: **DEFERRED MAINTENANCE**

The impact of deferred maintenance is far-reaching. The sight of leaking pipes and poor air conditioning and heating can impact a student's decision to apply and re-apply. As buildings deteriorate, applicant pools shrink and revenue falls. Without funding, buildings continue to deteriorate, driving incoming student interest down even further. Additionally, donor interest wanes.



CAMPUS CHALLENGE: **SUSTAINABILITY**

Higher education institutions are facing the daunting task of managing ever-rising energy costs, as well as being tasked with being more sustainable and reducing their carbon footprint. Large higher education campuses have built huge energy systems to heat and cool buildings. Their systems are expensive to operate, maintain, repair and update, placing a drain on institution operating budgets. In some cases, a lack of proper maintenance leads to additional financial and environmental burdens. As a result, campuses are looking for energy-saving solutions but are challenged in securing the funding for such projects.



CAMPUS CHALLENGE: **FUNDING**

Institutions rely on annual budgeting models for utility infrastructure operations and renewal, requiring utility systems to compete for annual funding with the academic mission. Significant annual expense and funding swings disrupt academic programs and interfere with level economic planning and effective cost recovery from campus constituents. In this constrained economic environment, managing and maintaining an institution's energy system infrastructure siphons money away from other academic and institutional programs.

A BETTER ENERGY MANAGEMENT OPTION: INFRASTRUCTURE OPTIMIZATION

Until recently, campuses have had only a few options for reducing energy costs. They have reduced energy usage, entered into performance contracts with energy partners and deployed campus-wide energy conservation programs. While these all work in powerful ways, they often do not generate the level of savings required to lower excessive deferred maintenance and invest in leading-edge energy technologies. However, a new financing option — **infrastructure monetization** — can. Here are answers to the most common questions asked about this innovative new path to energy/utility asset funding.

WHAT IS INFRASTRUCTURE MONETIZATION FOR ENERGY/UTILITY SYSTEMS?

Simply stated, a public-private partnership (P3) is a method of transferring some or all of the risk of executing a project to the private sector. This concept works by finding an investor to purchase or lease a campus's energy systems and infrastructure. This gives the institution the funds it needs for ongoing maintenance, to reduce deferred maintenance, deploy energy-saving technologies, and address other institutional priorities. Additionally, campus energy needs are met through a discounted buy-back arrangement from the investor.

HOW DOES IT WORK?

A financial organization, such as an asset management fund, invests in a campus's utility infrastructure by providing upfront capital and offering favorable repayment terms, either as a lump sum payment or long-term revenue stream. The campus receives up-front capital to use as it wants, such as investing in its endowment. The financing agency takes over responsibility for maintenance and upgrading the infrastructure to make the assets more efficient. These upgrades reduce the campus's carbon footprint—all the while taking energy system management off the balance sheet, creating a credit-positive financial posture. For its own energy needs, campuses pay for utilities based on agreed-upon discounted rate structures developed as part of the partnership contracting process.

WHAT IS THE PRIMARY BENEFIT?

A P3 infrastructure monetization investor relationship helps mitigate the financial problems of deferred maintenance, energy systems management, and other campus improvements by creating revenue that did not previously exist where payment takes the form of a lump sum or a multi-year ongoing revenue stream. Ongoing operations and maintenance for the upkeep of the systems and infrastructure is the responsibility of the third party. Invariably, investments are made in cleaner, greener technology maximize output and life cycle of the assets. For their own energy needs, campuses pay for utilities based on agreed-upon rate structures developed as part of the partnership contracting process.

Now the institution has an innovative new source of income that can be applied directly to deferred maintenance projects or other campus needs. It also achieves many other campus goals, such as infrastructure upgrades, lower operating costs, reduced risk, and reduction in greenhouse gases. The structure is also credit-positive, allowing for greater borrowing capacity in the future.

ARE THERE ANY SUCCESSFUL EXAMPLES?

The Ohio State University has embraced this model. In 2017, the board of trustees approved a 50-year agreement with Ohio State Energy Partners that will contribute an upfront payment of \$1 billion to the university's endowment. Ohio State will pay Ohio State Energy Partners a fixed fee, an operating fee and a variable fee every year for energy.

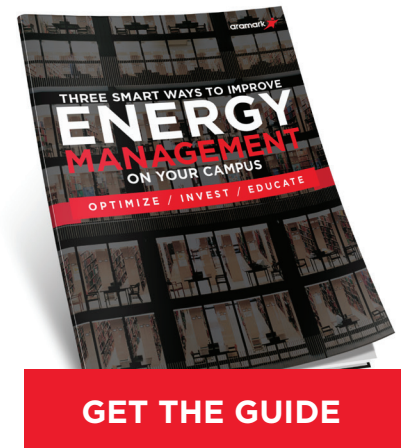


DOUBLING DOWN ON DEFERRED MAINTENANCE

It is important to realize that infrastructure monetization is only one of several levers an institution can pull to secure funding and address deferred maintenance. It is recommended that a multi-tiered strategy be employed to truly address energy and deferred need issues on campus. Other programs that institutions can take include:

- **ENERGY PROCUREMENT** – The decentralization of gas and electricity, coupled with real-time access to prices offers a huge buying opportunity for institutions. Baylor University famously secured a 10-year electric contract that reduced its annual spend by \$2 million.

- **ENERGY MANAGEMENT** – Every campus has some level of waste inherent in its operations and the many buildings on campus. Deploying proven strategies to optimize existing systems, such as scheduling, set-backs, occupancy sensors, and other low-cost approaches can be very effective at generating quick savings. These savings can fund other enhancements and equipment upgrades, which generate further savings. The results are lower operating costs and reduced backlogs.



- **COMMISSIONING** – Perhaps one of the most effective strategies is to adopt a campus-wide retro-commissioning program. Over time, building mechanical systems often operate way below optimal design intent. These systems consume more energy than they should. The retro-commissioning process optimizes these systems and reduces energy consumption and cost. Commissioning has documented results of operating savings of 5 to 15 percent, return on investment (ROI) exceeding 30 percent, and payback periods under five years.

ARAMARK

YOUR ENERGY MANAGEMENT OUTSOURCE PARTNER

Today's energy solutions are complex. You need an experienced partner to develop strategies and implementation tactics to deliver comfort to the campus, while reducing costs and reinvesting in the infrastructure to provide sustainable energy solutions. There are five major components which we can address for your campus:

1. Identification of campus needs, facility condition assessments, and [deferred maintenance backlogs solutions](#).
2. Strategic utility plans that address infrastructure upgrades, capacity needs and carbon footprint reduction.
3. Energy management programs (often with no capital investment) to harness campus energy waste.
4. Energy procurement strategies that leverage transparent energy market data to secure more favorable pricing
5. Operation and maintenance of energy plant and buildings systems

Today's higher education campuses face a range of energy management challenges, including aging buildings and infrastructure, a backlog of deferred maintenance projects, limited funds and a an exodus of energy expertise. Aramark develops and implements strategic, integrated actions plans that address short and long-term facility needs. Our expertise in energy management, commissioning, and strategic planning delivers proven value and measurable outcomes.

CONTACT US TODAY



What are the Benefits of P3 Energy Financing?

Infrastructure monetization is a cutting-edge solution that, so far, only a few progressive institutions have implemented or explored. But it's poised to become the next big avenue of funding thanks to the many benefits it delivers to higher education institutions including:

- **Opportunity to take energy maintenance expenses off university balance sheets**
- **A new revenue stream for reducing deferred maintenance projects**
- **Extra capital to invest in endowment or other high priority initiatives**
- **Funding for energy innovation and new technology**
- **Opportunity to partner with professional service firms to manage the energy system and free administrations to focus on their institutional missions.**