

6 WAYS TO SMARTER FACILITIES MANAGEMENT

1

INSTALL ENERGY-SAVING SYSTEMS

Today's smart districts are lowering emissions and saving energy and money by investing in efficient systems—including HVAC, lighting, roofing, ventilation, plumbing and more.

Over 39% of students are concerned about sustainability.

FAIL

- ✗ Haven't installed energy-saving systems or equipment
- ✗ Haven't assessed your energy efficiency in the last 5 years
- ✗ Don't have resources focused on energy conservation or efficiency

PASS

- ✓ Installed energy-saving HVAC systems
- ✓ Optimized programming on your heating and cooling systems
- ✓ Installed energy-saving lighting
- ✓ Installed a cool roof to lower peak energy demands
- ✓ Developed and executed energy conservation programs in your facilities management approach

BENEFITS

- \$ 10% savings or more on heating and cooling
- \$ Annual energy savings in the hundreds of thousands
- \$ Lower district-wide emissions of 30% or more
- \$ Reduce carbon footprint by reducing emissions by hundreds of metric tons



2

IMPLEMENT ENERGY-SAVING HABITS

Many districts are implementing cost-effective, energy-efficient measures by making better use of existing equipment.

A typical 50,000-square-foot classroom building uses more than \$100,000 worth of energy each year.²

FAIL

- ✗ Running air conditioner, heating and lighting in closed and unused buildings
- ✗ Not scheduling regular equipment maintenance and periodic tune-ups
- ✗ Haven't created a plan that identifies every opportunity to eliminate waste and maximize savings

PASS

- ✓ Turning down or turning off systems in buildings when they are not in use
- ✓ Installed controls for lighting and computers to shut down when idle
- ✓ Regular cleaning of condenser coils and changing filters
- ✓ Sequencing chillers on and off
- ✓ Conducted a comprehensive review of your HVAC systems in every building and analyzed them against building occupancy levels

BENEFITS

- \$ Reduce district energy consumption by 10% to 25%
- \$ Cut energy bills by 30% or more
- \$ Reduce district's carbon footprint by hundreds of metric tons
- \$ Gain cost savings of hundreds of thousands of dollars

3

LAUNCH ENERGY-SAVING PROGRAMS

District-wide energy-saving programs encourage students, staff and faculty to help lower energy use and boost your energy savings.

Over 31% of students believe energy conservation is the most important pursuit.³



FAIL

- ✗ Lack effective community programs that encourage students to save energy and the environment
- ✗ Haven't launched faculty or staff educational programs with a focus on energy conservation
- ✗ Haven't created district-wide recycling programs

PASS

- ✓ Launched student energy-saving competitions
- ✓ Launched social media campaigns with energy-saving tips for your community
- ✓ Launched district-wide recycling programs
- ✓ Launched faculty and staff educational programs that integrate energy conservation as part of the community culture

BENEFITS

- \$ Increase student and faculty enthusiasm for saving energy
- \$ Generate annual energy savings in the hundreds of thousands
- \$ Save millions of pounds of waste from filling up landfills



4

LEVERAGE INTERNET OF THINGS (IoT)

IoT is the latest catchphrase for the technology that connects people and business with all of the digital objects in their lives and workplaces. The expansion of IoT is affecting the way campuses manage, plan and execute facilities management in many productivity-enhancing ways.

There will be 6.4 billion internet-connected things in use worldwide in 2016—and 20.8 billion by 2020.⁴

FAIL

- ✗ Still deploying facilities staff across your district to manually check on buildings and grounds
- ✗ Facilities staff reactively handles crises, wasting valuable time and resources

PASS

- ✓ Virtually monitoring the physical condition of your entire district
- ✓ Environmental sensors and energy meters relay data on their performance to headquarters
- ✓ Proactively identify and address maintenance before systems become costly failures or emergencies
- ✓ Facilities team proactively manages school buildings and grounds based on data inputs

BENEFITS

- \$ Significant drop in risks from equipment damage and malfunction
- \$ Significant increase in facilities staff productivity and efficiency
- \$ Lower cost of operating well-running equipment and buildings
- \$ Free up resources for other critical campus budgetary expenditures

5

EXPLORE BUILDING INFORMATION MODELING (BIM)

BIM enables the creation and visualization of 3D spaces and equipment. Resulting in a database of building information that provides campuses with a trove of information in the palms of their hands for data analysis, diagnostics and decision-making.

Districts must find new ways to address the rising costs of facilities management.⁵



FAIL

- ✗ Haven't explored the potential benefits of BIM in your district
- ✗ Do not have a standardized database of facilities data
- ✗ Have no ability to integrate space and equipment data with your software for facilities management
- ✗ Have no ability to view, validate and/or update space and equipment with wireless technology

PASS

- ✓ Using 2D drawings or 3D models generated by BIM on wireless handheld devices to validate and update actual building space configurations
- ✓ Integrating your BIM space and/or equipment data with your Computerized Maintenance Management System (CMMS)
- ✓ Placed maintainable equipment within BIM models with direct links to essential resources such as user manuals, pictures and/or videos using wireless technology

BENEFITS

- \$ Reduce risks of expensive disasters
- \$ Improve facilities data integrity to reduce assumptions
- \$ Reduce space density challenges
- \$ Lower escalating district maintenance budgets
- \$ Reduce time and costs to collect and validate facilities data



6

OPTIMIZE SPACE UTILIZATION

How districts manage their space has become one of today's biggest challenges for K-12 education. That's why districts are establishing reliable space management systems to manage every square foot of space for maximum usage.

FAIL

- ✗ Don't know exactly how much net, gross and/or net usable square foot space your district has
- ✗ Have building space that is not being optimized
- ✗ Have no ability to verify and/or track space data using wireless technology
- ✗ Can't support the staff and budget levels you need for the work that must be done

PASS

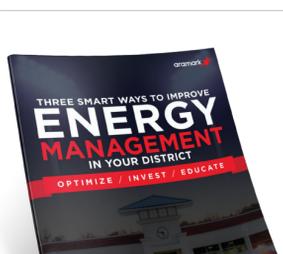
- ✓ Know the exact square footage and use of every building space in your district
- ✓ Track district space for efficient and cost-effective upkeep and repair
- ✓ Continuously validate space is accurate and represents existing configurations
- ✓ Created systems that mitigate facilities-related risks to your district

BENEFITS

- \$ Upgraded buildings keep operations running smoothly and lower maintenance costs
- \$ Reduce renovation expenses, making financial resources available for other district expenses
- \$ Well-maintained buildings improve students' experience and retention
- \$ All space is utilized optimally
- \$ Having accurate space allows the pursuit of grant or other applicable funding

READY TO IMPROVE YOUR DISTRICT'S ENERGY MANAGEMENT?

DISCOVER 3 MONEY-SAVING STRATEGIES IN THIS FREE GUIDE!



3 SMART WAYS TO IMPROVE ENERGY MANAGEMENT IN YOUR DISTRICT

OPTIMIZE / INVEST / EDUCATE

[CLICK HERE TO GET THE GUIDE](#)

Sources:

¹ www.nais.org: Environmental Education and Sustainability
² www.nais.org: Commercial Buildings Energy Consumption Survey
³ www.nais.org: Environmental Education and Sustainability
⁴ www.gartner.com
⁵ www.nebhe.org