



Sustainability Mythbusters

How do you define sustainability? Is sustainability something you seek out and relate to, or do you view it as an improbable outcome, or simply a "going green" initiative? Regardless of your perspective, you'll learn all the ways sustainability impacts municipalities and schools in this special publication by the Schneider Electric Energy and Sustainability Services team. Our goal is to highlight important trends, implications, and facts around this topic, as well as bust the most common misperceptions. We hope you enjoy this content.

- 1. There is no demand for sustainability in municipalities and schools
- 2. Sustainability does not make business sense
- 3. Sustainability is all about being green

- 4. Sustainability is too expensive
- 5. The impacts of sustainability are limited

Schneider Electric has a proven record of helping organizations develop and implement thriving sustainability programs across economic, environmental, and social dimensions. As a global leader in energy and sustainability services, the company provides an unmatched end-to-end solution that encompasses every phase of the sustainability journey. Through our capital recovery and reinvestment program for municipalities and schools, Schneider Electric is able to drive successful sustainability programs that accelerate organizational performance.

To learn more about our offerings, please visit: www.enable.schneider-electric.com.

There is no demand for sustainability in municipalities and schools

People today care about their impact on the world more than ever. The tide seems to be turning toward consumers who prefer, if not outright demand, more sustainable products and services. As these consumers push for greater sustainability, it forces holding companies to bear greater accountability for producing tangible results from their own corporate social responsibility programs, according to research conducted by the marketing firm Cone Communications.

Like the private sector, many public entities have also been experiencing mounting political and social pressure to make a greater commitment to sustainability. And what starts as social interest often ends up becoming a government requirement. For example, industry watch dogs, such as the American Council for an Energy Efficient Economy, have been lobbying state governments to enact reforms and those have trickled down to cities and counties. Dozens of states and municipalities now have public goals, or even compliance mandates, to hit specific sustainability metrics by set dates. And that trend is only expected to increase in the coming years.

While part of the trend is driven by regulation, there's also an increasing awareness that sustainability-focused organizations are able to outperform their peers. They do so not only by running more efficiently, reducing waste and cutting costs, but also by enjoying greater appeal and loyalty from those who value a more sustainable community.

The education sector is also feeling the pressure. In fact, in higher education, having a sustainability program can be imperative to success. Consider, for example, that more than 60 percent of students said a college's commitment to the environment would impact their decision to choose a school, according to the Princeton Review survey of more than 10,000 college applicants.





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Princeton Review survey

1 There is no demand for sustainability in municipalities and schools

That sentiment carries over to the wider population. Nearly 80 percent of Americans are in favor of sustainable communities, according to a 2010 Ford Foundation survey conducted by Harris Interactive. Those sentiments drive where people live and work . . . and thus where they spend their money and pay their taxes.

And the reality is that natural resources will continue to become constrained in the future. Supplies are limited, but the demands of an ever-increasing population are not. Similarly, energy prices are expected to rise in the coming years, making oil, natural gas and other resources – and the energy they provide – much more expensive.

As this happens, public entities will be required to take a more sustainable approach to how they function. They won't be able to ignore the parts of their organization that are wasteful and inefficient, in part because they won't be able to afford to do so. It will become even more important for organizations to look closely at their costs, and to make sure they're operating in a sustainable way. If they're not, they probably won't thrive for long.

So, the demand for sustainability is here to stay. It may not be as directly evident as other popular trends, but it is real, it is increasing, and its implications will continue to influence the way of the world in the years to come.

Our other myths explore the reasons why . . .



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Ford Foundation survey conducted by Harris Interactive



2 Sustainability does not make business sense

Anyone who would say that there is not a business case for sustainability might want to talk to <u>Dallas County</u> municipal leaders. The second largest county in Texas recently embarked on a \$43 million sustainability plan that will generate 400 jobs and \$58 million in new business sales, which will create another \$2.3 million in state and local taxes – all while lowering its operational costs and saving taxpayers money.

Skeptics could also look at <u>Marshall County Schools</u> in Holly Springs, MS, which recently implemented a sustainability plan to reduce energy consumption by nearly 30 percent for a savings of \$150,000 annually. Over the life of the project, the school district will save more than \$4 million, allowing it to put money back into classrooms.

<u>Walla Walla Community College</u> is another great example, leveraging its impressive sustainability project as a new curriculum for students, as well as a new way to market itself to prospective students in the very competitive higher education space.

Job growth, student recruitment, local business sales, and increased tax revenue all prove that sustainability projects are a good bet for economic development. In fact, research by the Southeast Energy Efficiency Alliance has shown that energy projects have a 387 percent return on investment and are better job creators than construction, manufacturing and renewables.

Sustainability also leads to gains in efficiency that ultimately results in cost savings and reduced budget needs for facility operations. Hospitals that invest between \$100,000 and \$1 million in saving energy, for example — things like HVAC upgrades and lighting retrofits — can cut energy use by up to 20 percent. Those that take a more comprehensive approach have the potential to save more than 30 percent on energy costs and see their profitability rise.



1387%

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SEEA Energy Pro3 Report, June 2014

2 Sustainability does not make business sense

Efficiencies aren't all connected to energy either. Being more efficient with other resources helps bolster the business case for sustainability as well. Consider the <u>City of Foley.</u>

<u>Alabama</u> that installed a weather GPS irrigation system so its sprinklers will no longer run when it's raining outside. Not only does it cut costs by reducing overall usage, but there is then less water that needs to be purchased, treated and transported. Minimizing waste also plays a huge role in maximizing efficiency and improving an organization's financial performance.

Sustainability makes a sound business case on a bigger level as well, in terms of risk management and business continuity. Climate change will likely impact all kinds of organizations in the near future, whether it's a city in California facing drought conditions or a county in the Northeast facing severe winter storms or super storms such as Hurricane Sandy.

Committing to be more sustainability now can help brace for the challenges in the future. Organizations that manage sustainability well are managing risk well and will be duly rewarded.

The business case for sustainability is no myth. It is real and can be measured in many direct and indirect ways. And while there are many organizations out there that have made a real commitment to be sustainable and are reaping the benefits from it, there are those that remain skeptical. That won't be the case much longer: either they will see the benefits and make the shift — or be left behind.



3 Sustainability is all about being "green"

Think about sustainability and what comes to mind?

For many, it's likely thoughts of green trees and recycling, reusable cloth bags and big piles of compost. Sustainability doesn't often conjure up visions of government entities, and even if it does, it's usually of cities that have long been thought of as green — the Portlands and Seattles of the world.

Yet, contrary to what many people may think, sustainability is not all about hugging trees. In other words, sustainability, especially when it comes to the business case for it, is not all about being green. In the larger, more accurate view, sustainability encompasses a much broader scope, from improving energy and operational efficiency to reducing carbon footprints to cutting down on waste, giving back to the community and, yes, taking better care of the environment, trees and all.

In that sense, organizations not known for being green or sustainable have nonetheless committed to sustainability as a way to improve their overall performance. They are not the San Franciscos of the world, but instead the midsize municipalities, school districts and community colleges across the country. They are the public entities that see the value in sustainability as a business proposition.

Take, for example, <u>Snowline Joint Unified School District in California</u>. The 7,800 student district is implementing a district-wide energy savings performance contract (ESPC) that will enhance the learning environment and reduce energy and maintenance costs by 28 percent, or nearly \$8.5 million over the next 20 years, with no tax impact to local citizens. What's more, four of the district's 15 sites will become Zero Energy Campuses (ZEC), producing as much as they consume through clean, renewable resources over the next year at the project's completion. The cost of the project will be fully funded over time by leveraging California Proposition 39 (Clean Energy Jobs Act) funding and the energy and operational savings that will result from the project's installation.



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3 Sustainability is all about being "green"

That's just one example, but organizations everywhere can take steps toward sustainability that have little relation to stereotypically green ideas and much more to do with operational efficiency, improved outcomes and a better bottom line.

Sustainability initiatives can also help organizations satisfy government mandates, watchdog groups, and community members looking for a commitment to sustainability, either for its environmental or economic benefits — or both.

Similarly, sustainability often plays a major role in organizations' mission or vision statements, with endeavors like charitable donations or employee volunteerism that provide community benefit. In that case, sustainability isn't necessarily about being green, but about being a good corporate citizen.

There are, of course, times when sustainability actually is about being green. That could mean community-wide recycling efforts or investing in fleet vehicles that run on biodiesel. In some instances, it might include resource stewardship. Think about the <u>City of Boston</u> that developed a climate action plan to reach its lofty goals of reducing greenhouse gas emissions by 25 percent by 2020 and 80 percent by 2050. Boston has since been named the most energy efficient city in the U.S. by the American Council for an Energy Efficient Economy.

Certainly, there is a component of sustainability centered on the environment and treading lightly on the planet. But the concept is much broader than that. For public entities, sustainability touches on everything from efficiency and productivity to managing costs and community reputation. It's green to be sure, but there's a whole spectrum of different shades blended in as well.



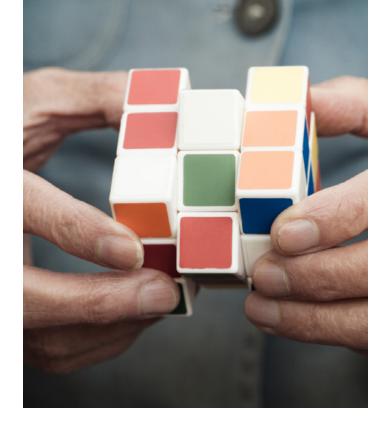
Energy Management - City of Boston

Sustainability is too expensive

In a time when the economy is still recovering and budgets are tight, focus on sustainability can begin to drift because of the myth that sustainability is an unproven investment. When public entities face any kind of financial challenge, building operation and utility budgets are often the first to be cut with cliché lines like, 'That can wait another year.' But facility managers know that once something goes into the deferred maintenance column, it's difficult to get it out even when things start to improve. Instead, public organizations often find themselves with an increasingly large dollar value of capital renewal in deferred maintenance where buildings become more expensive to operate and less safe for the public. And what's more, this approach of kicking the can down the road actually devalues your asset base over time.

However, the reality is that energy and sustainability programs can actually pay for themselves with little or no upfront capital required, or even save excess money to reinvest back into the community. In fact, an effective plan can actually accelerate bottom-line results by contributing to short-term operating cost savings. Consider Madison County Schools in Huntsville, Alabama. Before they had an effective plan, the board found themselves in a bind familiar to many post-recession municipalities, schools and counties. After years of dramatic growth, and accompanying bond measures to build new facilities, Madison County Schools couldn't take on more debt, leaving nothing to address the school's deferred maintenance issues and aging facilities.

The problems were especially acute with the major heating and cooling systems. The air quality was becoming a serious health concern. On occasion, teachers had to shuttle students during a lesson from classroom to classroom due to insufficient cooling or heating. The schools' facilities staff was aware of these operational inefficiencies, which were costing the district more than a million dollars every year, but were forced to put a band aid on everything.



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4 Sustainability is too expensive

Conventional funding methods to deal with these serious maintenance issues wouldn't be available for five to 10 years, leaving the district in desperate need of a plan.

And that's just what Schneider Electric was able to provide them. After teaming with us, Madison County Schools went from nearly zero in maintenance upgrade funding to more than \$14 million in alternative financing via an energy savings performance contract. Energy savings performance contracts, or ESPCs, use savings from energy conservation improvements to fund infrastructure and maintenance projects.

The district is using those funds, along with a mix of other traditional and alternative financing, to pay for the much needed heating and cooling improvements, along with a host of other upgrades, including a district-wide IT enterprise management system to control power to 7,000 pieces of equipment. Those upgrades will reduce energy consumption by 40 percent, saving taxpayers approximately \$1.8 million annually in utility costs – and provide healthier classrooms for students and teachers.

Over the next 20 years, the environmental impact of the project will be equivalent to removing 52,000 cars from the road, 242,000 tons of carbon dioxide from the atmosphere, or planting 65,000 acres of trees. The combined savings will amount to \$40 million in capital avoided cost savings. That's money the district can use to fund other needed improvements.

All in all, the big-picture benefits that come from investing in sustainability more than overshadow the price tag connected to well-executed programs. If you appropriately design a plan, you'll be in position to deliver efficiency and sustain results; turning the myth from, "It's too expensive to be sustainable" into "It's too expensive not to be."



The impacts of sustainability are limited

Of all the ideas around the world concerning sustainability, none may be more patently false than the myth that the impacts of sustainability are limited; that somehow, sustainability initiatives will have only short-term, small-scale benefits for the organizations that implement them.

Such a view is simply not looking at sustainability with a very clear view.

In reality, the impacts of sustainability are often much greater and much farther reaching than they're originally expected to be. They range from long-term cuts in energy usage and reduced waste to increased efficiency and better utilization of resources. There are often unpredictable impacts, as well, such as cost avoidances, strengthened community loyalty and even shifts toward sustainability in neighboring districts and communities looking to benefit from similar impacts.

Take, for example, the idea of size and scale. Even the tiniest of changes, when scaled out over hundreds of municipalities or school districts can be massive. A savings of five percent on energy usage, achieved through a relatively simple and cost-effective tweak, may not seem huge at first. But if you're spending \$500,000 a year on energy, those savings add up quickly.



Energy and sustainability projects help cities and schools achieve win-win in community development

In the last 5 years, 420+ energy infrastructure projects had a total economic impact of more than \$1.9 billion over the life of the contracts*

5 The impacts of sustainability are limited

Well planned sustainability initiatives also have impacts that are long-lasting — not limited. You often hear about organizations that invest in energy-saving projects expecting to recoup their costs in a certain number of years. But once that initial payback has been achieved, the benefits don't stop. The organization continues to use less energy and the savings extend for many years.

One case-in-point is the <u>City of Houston, Texas</u>. As part of their commitment to the C40 Cities Climate Leadership Group, a network of 70 of the world's megacities taking action to reduce green house gas emissions, the City embarked on a multi-phased energy savings performance contract (ESPC) that has included upgrades to 44 buildings since 2008. Those upgrades have cut utility costs by 31% and are guaranteed to save the City \$50 million over the course of the 15-year contract. What's more, even after the contract expires, the City will continue to reap savings that can be allocated toward critical capital improvement projects for years to come.

As the scope of sustainability has grown in recent years, so too have its impacts. Within more organizations, sustainability has spread across departments and has become a part of every employee's job, much the way safety became more integrated decades ago. As such, it now courses through and impacts every aspect of an organization, whether its office workers recycling copy machine paper, teachers turning off computers at night, or the chief sustainability officer discussing procurement strategies with other members of the leadership team.

Similarly, the impacts of current sustainability efforts won't be limited to this place in time. Much as we are living and doing business today as a result of sustainable breakthroughs from years past, so too will the generations of tomorrow be guided by the innovations of today. And not just isolated businesses or communities, but entire economies that are still developing will be guided in part by the sustainable measures and practices of our current times.

That's an impact that doesn't seem very limited at all.



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- Highest-ranked energy services company (#9) among the top 100 of world's most sustainable corporations, as named by Corporate Knights, Inc.
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May 2016 | Document Number 1900BR1501

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