

Open**Blue** Net Zero Buildings

Myths and facts about decarbonizing your building portfolio

Along the net zero journey, it's easy to get derailed. After all, the Paris Agreement's global goal to cut carbon emissions by more than 40 percent by 2030 is only seven years away, and emissions factor into nearly every crevice of a business' operations, presenting leaders with a morass of complex choices.

Nevertheless, it's important that companies don't fall prey to prevalent myths about decarbonization strategies. Here are some to keep in mind.

MYTH: A digitally enabled building environment is an unnecessary and overly complex step in the net zero journey.

FACT: You'll never achieve your decarbonization target without a digitalized building environment.

The ability to continuously track energy usage and operations information provides building operators with insight into how a building or infrastructure system is performing – and where the 'leaks' are. Smart data helps a company put its current status into context and find opportunities for improvement. It's a tool to set targets, achieve compliance and address reporting requirements.

A digitalized building collects data automatically and shares this information on dashboards in real time. It also sends in regularly scheduled reports to interested parties and adjusts settings according to feedback. The data should be collected and stored securely, which is why it's vital to choose partners that maintain the highest data standards.

Companies may be tempted to collect data manually, but that is a daunting task – one that gobbles up large numbers of employees and a costly amount of time, particularly at large organizations. Also, gathering and analyzing data quickly enough to be useful is impossible, and rife with human error. "

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By **John Fleming**, Vice President of Commercial Innovation, Sustainable Infrastructure Digitalization is key to quick information analysis, program validation and operational health. And it is vital as you implement decarbonization strategies.

MYTH: I don't need to reduce my buildings' energy usage to achieve net zero – I can buy renewable energy certificates (RECs) to get there.

FACT: You'll likely need to address your energy supply and demand on your path to net zero.

An REC is a market-based instrument that represents one megawatt-hour of electricity delivered to the grid from a renewable source. Companies can purchase RECs as a way to contribute to overall renewable energy usage.

While procuring a renewable energy supply is a component of every net zero program, it cannot be the singular strategy. For one thing, demand for RECs will ultimately outpace the supply, and the market won't be able to buy enough RECs to solve for decarbonization. Also, as demand for RECs increase, the cost will continue to rise. This makes demand-side projects more appealing and may make it infeasible to continue relying on RECs as a major part of the solution.

In the big picture, nothing is better than unused energy, and energy reduction is a core component to all decarbonization programs.

MYTH: Companies must sacrifice a healthy/comfortable building strategy to decarbonize.

FACT: Your building can be net zero and a great place to work at the same time.

It's true that air quality or occupant comfort products can increase energy usage. However, there are strategies available to manage emissions for these products, including decarbonization of heat through electrification and technologies with thermal efficiencies that can reach above 100 percent. It is possible to engineer building mechanical equipment to strike the right balance to achieve both outcomes.

Air quality and carbon emissions don't have to be at odds. It is important to address air quality and occupant comfort levels while reducing emissions. After all, the tenants, employees and customers inside the building are the core of the building's purpose.

MYTH: Decarbonization is for new buildings only. It's too difficult to achieve in older or historic buildings.

FACT: You can't ignore your current building stock and expect to achieve your target.

Approximately <u>two-thirds of the buildings that exist today</u> will still be here in 2040 – so companies need to decarbonize their current footprint, old and new buildings alike. It can be done, as seen with the municipality of <u>San Mauro Torinese in Turin,</u> <u>Italy.</u> The first step is to assess and tackle any deferred maintenance items.







The good news is that this can improve energy efficiency and sustainability, by addressing leaks, boosting HVAC maintenance, replacing sensors, and other improvements. It will give you a head start on your goals. "As-a-service" models or outcome-based arrangements are great ways to preserve capital while addressing operational, sustainability and resiliency needs of your current buildings. These models, which take a comprehensive approach from baseline through execution to results measurement, can be applied to all building types, including new or existing buildings.

By the way, new buildings are not always picture perfect. It's important to understand that with new construction, builders face pressure around the initial cost versus the long-term cost of ownership. During any new construction process, make sure your partners aren't sacrificing long-term sustainability and resiliency for dayone cost savings.

MYTH: It's cheaper to oversee decarbonization efforts yourself and hire multiple vendors. Net-zero-as-a-service is too expensive.

FACT: Partnering with net-zero-as-a-service experts can save you money and time through outsourcing, with a guaranteed-results approach.

As a leader, you must choose where to invest your budget, time and focus. Most companies want employees to focus on improving business performance. That's why it makes the most financial and structural sense to hire building experts to oversee a facility portfolio's decarbonization efforts and hold these partners accountable with outcome-based arrangements.

One argument for this approach is that leaders often experience sticker shock after seeing how much decarbonization will cost and wind up doing nothing at all. Unfortunately, failing to decarbonize is even more expensive for your business, local community and the planet in the long run. This becomes clear when you apply the cost of carbon to your equations.

Another reason is the big risk of failure when going it alone – you can end up with a very pricey piecemeal approach that doesn't make much of a dent in your overall net zero goals. Hiring building technologists is a well-known challenge, and these roles are needed to ensure you meet your company's decarbonization goals.

By transferring risk to an as-a-service partner, you can guarantee that your targets and operational metrics are achieved on time and on budget. Building industry companies offering net-zero-as-a-service have pathways and proper assessments to hire, train and manage hundreds, even thousands, of technical staff including hightech building analysts and sustainable infrastructure experts each year. It's a more scalable operation that most companies cannot take on themselves.

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Also, remember that decarbonization projects are both local and global. They need to be delivered locally but managed holistically across your building portfolio. That's because people, processes, technology, equipment and data collection work in sync across the organization. Selecting a partner with local, national and international capacity to match your footprint is key.

Company leaders don't have to delegate all decarbonization tasks in the as-a-service model, but they should understand the risks and benefits of what they keep versus what they delegate when making the decision.

MYTH: You can start your decarbonization efforts later - there's still time.

FACT: Many companies are already behind in their decarbonization plans and it will only get harder and more expensive going forward.

Decarbonization is here to stay. It's not just a planetary issue, but a business issue. Companies are already competing against peers for investment dollars, customers and vendors based partly on sustainability efforts. It will get even more important in the coming years.

Ultimately, this myth is the most damaging one. When leaders believe that working toward decarbonization is something they can start next year, the year after, or next decade, they will find themselves behind the eight ball.

Companies that don't start now will be left without the partners and resources needed to achieve their targets – and it will become a major business challenge. That's why the time to start is now.

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