

Data Center Professional Insights

Volume 1

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Life Is On

Schneider
Electric

IN FOCUS

Sustainability and digital transformation — for the business and the planet.

Organizations globally are at a tipping point where the decisions made today will affect future generations. Digital transformation is becoming more and more essential to society, driving the demand for data.

Today, data centers consume 1% of global electricity use, but it's forecast to soar. In fact, by 2035, Schneider Electric estimates that all IT will consume 8.5% of global electricity compared to 5% in 2021—and data centers are expected to take up a significant share of this demand.

With this growth, it is imperative leaders across all sectors come together with sustainability front of mind. Businesses globally need to build and evolve for a more ecologically sustainable future.

Schneider Electric recognizes and supports the many data center professionals who have publicly declared their commitment to more sustainable approaches to digital business. Across all industries, data center operators strive to reduce the carbon footprint while maintaining or improving operational resiliency. Increasing water and power savings, adapting to climate change effects are just some challenges as there is growing demand for accountability on climate impact among stakeholders.

We have compiled the key insights and trends which data center professionals are evaluating today, so that they can build the sustainable infrastructure of the future.

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INSIGHT 1

Not all data centers are created equal

With the rapid pace of digital innovations, data center professionals have to adapt and monitor this new surge in edge data center energy consumption. And across all enterprises, the demand will continue to grow.

Projections conclude that there will be 7.5million more micro data centers expected to be installed by 2025.

Data center professionals are under more pressure to ensure critical networks, systems and processes are sustainable. If edge data centers consume too much energy, it can prove costly to both the business and the environment. To achieve successful transformation, Schneider believes the deployment of edge data center requires:

Increased standardization and integration

Easy-to-use digital design tools and platform standardization are the key to simplifying the deployment and maintenance of multiple edge data centers.

Cost effective serviceability

Data center professionals are looking for well designed solutions to remove the complexity in monitoring and dispatching multiple edge sites.

Greater efficiency

Data center professionals are leveraging new capabilities like data insights, benchmarking, and predictive analytics to improve sustainability and to drive lower costs.

Remote monitoring and management with AI

Remote monitoring and management capacities have become a top priority particularly. With the hybrid work environment, data center professionals need to remotely monitor the sustainable impact of their critical edge data center infrastructure.

[Read more on what to consider when building sustainable edge data centers.](#)



INSIGHT 2

Putting energy into sustainability

Data centers are the foundation for the entire digital economy. Schneider Electric's customers have realized that having a comprehensive strategy towards data center sustainability and energy optimization is a proven competitive advantage.

Schneider Electric is helping DataXion, the largest data center in North Africa. With our data center solutions, DataXion can provide all their customers (banks, insurance companies and financial institutions) with uninterrupted data that is powered sustainably.

The results:



35% energy savings



30% cost savings in maintenance



20% cost savings on engineering, commissioning costs, and time optimization

“Thanks to the design, the technical choices and operational management, we (are) making 35% of energy saving today. We optimize to be competitive and respect the environment.”

Naceur Kchaou,
General Manager of DataXion

[Read how Schneider Electric helped DataXion optimize its efficiency and reduce energy consumption.](#)



INSIGHT 3

A four-stage plan to help you overcome climate challenges

Incorporating sustainable practices is easier said than done. However, Schneider Electric believes in achieving true data center sustainability, you need a comprehensive, but still manageable plan.

The key steps are:

- 1. Define success:**
Know what you are aiming for and empower your team to help you achieve it.
- 2. Set targets:**
No matter how large or small and make small gains wherever possible — 1% annually over 25 years will significantly affect a global organization.
- 3. Deploy holistic programs:**
Look at the entire business and analyze where to make improvements monthly, quarterly, or annually.
- 4. Sustain your results:**
Track your progress through monitoring, managing, and sharing the lessons learned.

[Read more practical tips and discover why sustainability is imperative for data centers.](#)



INSIGHT 4

Building connections with sustainable growth

Data center professionals are looking for complete comprehensive security—and it isn't just data breaches that are doing the damage. By utilizing sustainable resources, organizations can improve operational resiliency and prepare for the changing environment.

Schneider Electric is helping EcoDataCenter, a provider of HPC and colocation services, maximize their energy sustainability and build connected solutions.

EcoDataCenter needed to improve overall efficiency to meet the sustainability goals of the power-intensive data-center industry. They were also looking to reduce operation costs and use the savings to facilitate corporate growth the high uptime expectations customers demand from co-location providers.

Through their partnership with Schneider Electric, EcoDataCenter could embrace new technology with connected products improving efficiencies—this, fortunately, reduced power consumption and supported the company's efforts to run a sustainable operation.

[Watch this short video to see how EcoDataCenter is utilizing the combination of Schneider Electric's EcoStruxure and hydroelectric power to build one of the most sustainable data centers in the world.](#)

“When we are building data centers, we realize that we are part of the community... we are connected to the local grid [and] local district heating network. We want to make sure that we give something back to the community.”

Mikael Svanfeldt
Chief Technical Officer,
EcoDataCenter



INSIGHT 5

Stay sustainable with the right UPS

The difficult task for data center operators is how do you choose a UPS system that supports your overarching sustainability goals, leverages technological advances, and is supported by an uninterrupted power supply?

To help you, we have broken down the top 5 considerations when choosing UPS for data centers:

1. Sustainability and Energy Savings:

Sustainability isn't just a "nice to have for data center operators." It is a competitive differentiator, and customers are starting to expect it.

2. Space:

Data center real estate is always tight and highly valuable. To optimize the available space, operators should look for UPS that doesn't compromise efficiency for density.

3. Modular and Scalable Platform:

UPS design has innovated and is now modular and scalable. Data center operators need to scale their UPS to the right size for current needs but maintain the flexibility to add power modules to prepare for any future growth.

4. Energized Swapping:

Data center operators should be looking for UPS with intelligent features such as energized swapping, where modification to the UPS modules is done with minimum downtime.

5. Remote Monitoring, Management, and Modeling:

With the post-pandemic landscape, having the visibility and ability to monitor, manage, and model remotely is a top consideration.

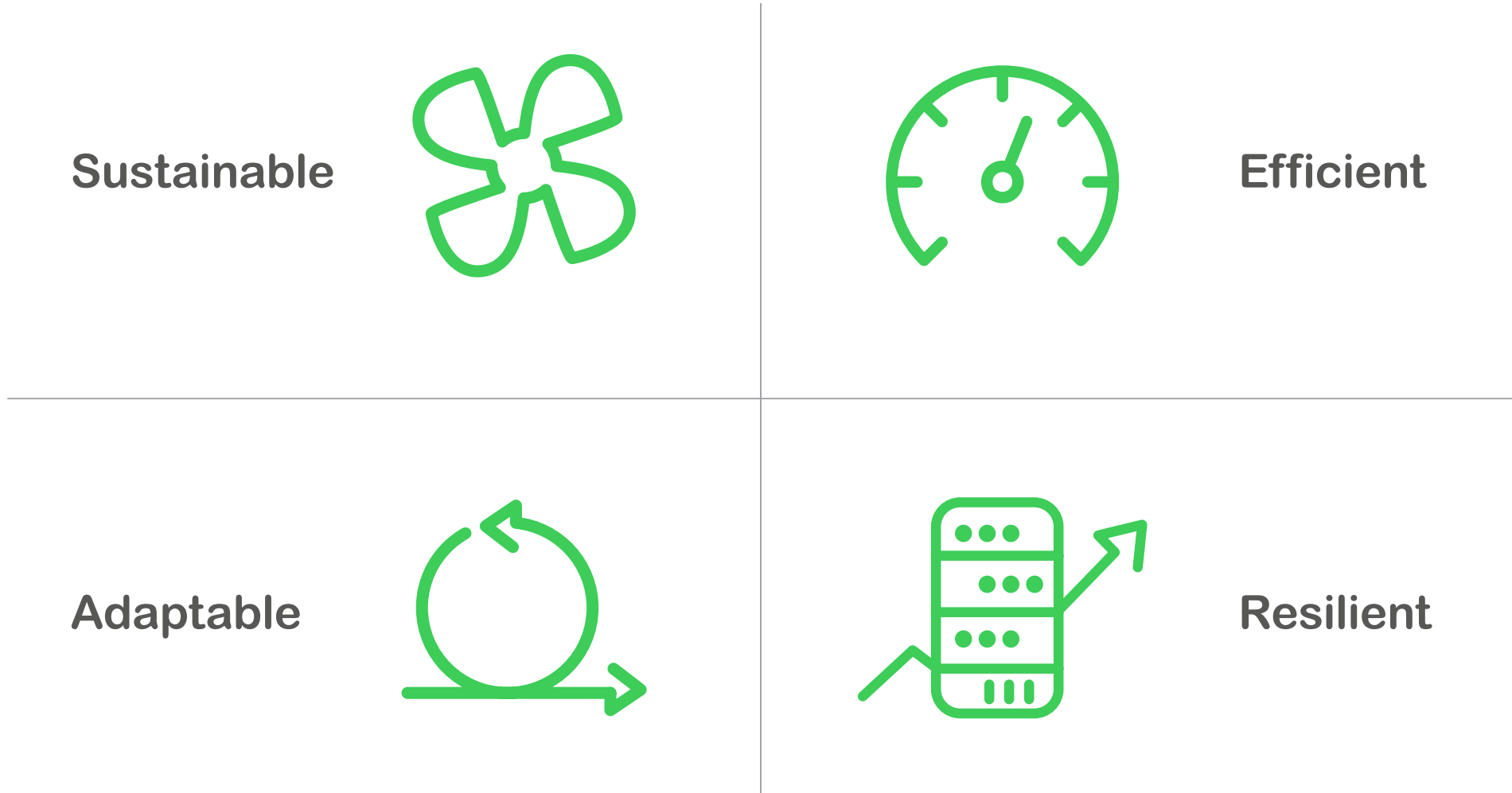
[Find out how to choose the right UPS for your data center.](#)



INSIGHT 6

Help your business lead the sustainability change

In summary, there are four defined needs for the future of data centers:



The focus will remain on sustainability as the industry evolves from 2021—because when a company successfully focuses on sustainability, it consequently improves operational efficiency, adaptability and resiliency.

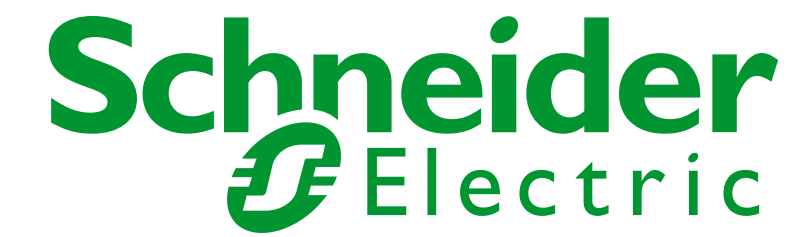
Private and public sectors need to access and target the value chain, and Scope 3 emissions. It is essential for your business that the software and technology development is continuous and sustainability is the number one priority—it is key to the next generation.

“One of the challenges is the multi-layered approach. Electricity is everywhere, so we must have good software that connects the dots. Customers are not just looking at prices but partners that can reduce carbon.”

Natalya Makarochkina
Senior Vice President of the Secure Power Division International Operations for Schneider Electric

[Read more on how you can drive efficiencies, improve resiliency and stay adaptable with Schneider Electric—the journey to cutting emissions has only just begun.](#)

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About Schneider Electric

Schneider's purpose is to empower all to make the most of our energy and resources, bridging progress and sustainability for all. We call this Life Is On.

Our mission is to be your digital partner for Sustainability and Efficiency.

We drive digital transformation by integrating world-leading process and energy technologies, end-point to cloud connecting products, controls, software and services, across the entire lifecycle, enabling integrated company management, for homes, buildings, data centers, infrastructure and industries.

We are the most local of global companies. We are advocates of open standards and partnership ecosystems that are passionate about our shared Meaningful Purpose, Inclusive and Empowered values.

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