

CrossTalk

Your Source for Industry News & Insight

NEWSLETTER

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Bringing Sustainability TO THE Building

As cities expand, sustainable smart buildings will play a key role in reducing the carbon footprint of buildings both in their construction and in operational efficiencies.

Daily, we are experiencing the impacts of unprecedented levels of atmospheric greenhouse gasses with rising global temperatures, more frequent extreme weather events, and strained natural ecosystems. As a result of this burgeoning crisis, **countries all around the world have established goals to reach net zero by 2050.** These targets ensure that all sectors of the economy play their part to lower emissions and will shape economic choices in the years to come, especially in the face of the global trend of city migration.

City development is projected to dramatically grow over the next few decades as populations flow into cities. Over 68% of humankind is expected to live in cities by 2050, more than 2.5 billion more than live in cities today. **Cities only cover 2% of the world's surface while consuming 78% of the world's energy,** with a large portion of emissions stemming from buildings. Currently, buildings contribute 39% of annual global CO₂e emissions. Most of these emissions come from operational carbon, or emissions produced by the building's operation and energy consumption. The remaining emissions are embodied carbon, or emissions created from the manufacture, transportation, and construction of building materials. Cities will be forced to grow and, if they rely on traditional building solutions, will contribute excessive emissions.

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Bringing Sustainability to the Building

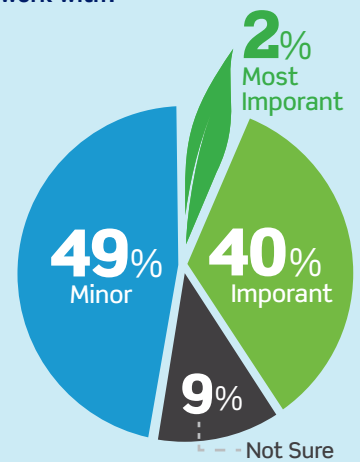
Environmental Product Declarations (EPDs)

News You Can Use

Ask the Experts

LEVITON POLL

How important is sustainability for your company in selecting products and companies to work with?



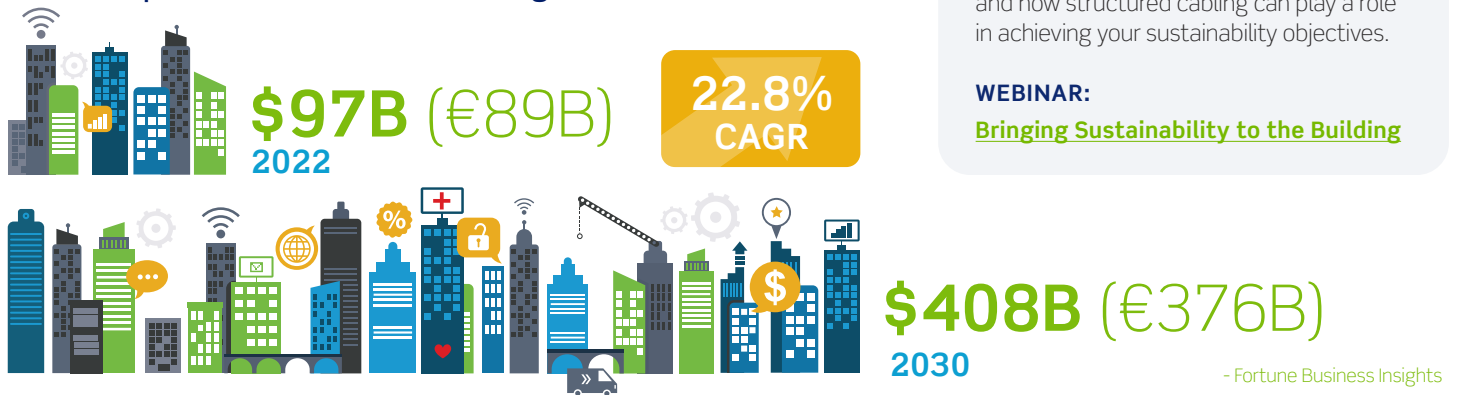
From a December 2023 survey of 115 U.S.-based network professionals.



How can smart buildings lower emissions? In terms of curbing operational emissions, smart buildings offer the solution to grow cities while meeting sustainability goals. The smart building market is expected to rapidly grow from \$97B (€89B) to \$408B (€376B) in 2030. Smart buildings require a networking backbone to allow all the building's Internet of Things (IoT) sensors, appliances, and systems to work in concert. These systems could be building automation systems to efficiently monitor usage, waste, and consumption. Smart building networks could also help to integrate renewable power sources, enhance space utilization, and more.

Leviton has developed innovations in network architecture, like the ULAN™, to reduce operational emissions in smart buildings, which is key to making a positive impact towards a more sustainable future. Explore ULAN at [Leviton.com/ULAN](https://www.leviton.com/ULAN).

Expected Annual Smart Building Market Growth



The smart building market is expected to grow rapidly.

Learn more about green building initiatives and how structured cabling can play a role in achieving your sustainability objectives.

WEBINAR:

[Bringing Sustainability to the Building](#)

LEVITON NETWORK SOLUTIONS Environmental Product Declarations

Leviton Network Solutions is now providing Environmental Product Declarations (EPDs) on end-to-end copper systems. As a global leader, we are committed to protecting the environment through the design, manufacture, and delivery of sustainable network infrastructure. We believe it is our responsibility to make an impact by fostering sustainability through our behavior and building solutions to help preserve the environment.

What are Environmental Product Declarations?

Now more than ever it is vital for businesses to act by conserving valuable natural resources and limiting their emissions to avoid the more severe trajectories of climate change. Leviton Network Solutions has acted by investing in environmental certifications consistent with green building practices and providing valuable tools allowing businesses to make more sustainable choices when it comes to buying and installing networking products.

EPDs play a key role in contributing towards the many standards, ratings, and certification programs in the marketplace and help guide, demonstrate, and document efforts to deliver sustainable, high-performance buildings.



An EPD is a third-party verified and registered document that communicates a standard set of information about the life-cycle environmental impact of products. It is created in compliance with Type III Environmental Declaration (ISO 14025).

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Building owners and their customers are increasingly conscious of the need to transition to a sustainable built environment and Green Building certification programs play an important part in this transition. These programs rate or score building performance against specific sustainability goals and requirements, encouraging choices in building construction that will help protect the environment. EPDs play a key role in fulfilling the goals of green building initiatives. Initiatives such as Building Research Establishment Environmental Assessment Methodology (BREEAM), Leadership in Environmental Design (LEED), Green Building Initiative (GBI), Estidama, and Global Sustainability Assessment System (GSAS) utilize EPDs to evaluate construction materials for their sustainability, and award credits and certifications for projects based on the materials used.

Why Are Green Building Certifications Valuable?

Each rating system aims to mitigate the impact of buildings on the natural environment through sustainable design, however green building ratings, or certification systems, broaden the focus beyond the product to consider the entire project. Green Building certification also provides incentives for clients, owners, designers, and users to develop and promote highly sustainable construction practices. However, it is important to note that a building does not have to be certified to be sustainable and well-built.

These certifications provide a framework for assessing the environmental performance of buildings and promoting sustainable design, construction, and operation practices. They help building owners and occupants reduce their environmental impact by encouraging the use of energy-efficient technologies, renewable energy sources, and sustainable materials. Green building certifications can also help building owners demonstrate their commitment to sustainability to customers, employees, and the wider community. EPDs are one method of contributing to a green building certification.

Check out our Environmental Product Declarations at Leviton.com/epd.



COMPANY



Leviton is thrilled to announce our acquisition of PRISM Data Centre Solutions (DCS) Limited! This marks a significant expansion of our network solutions, adding top-tier network racks, data, and server cabinets to our offerings in Europe and in the Middle East.



[Read more about the UK company acquisition.](#)

PRODUCT

With **GREENPACK™** bulk packs and **Sustainably Smart Packaging**, our packaging is designed to use less material, while using more recycled and recyclable materials.



Benefits of GREENPACK Sustainably Smart Packaging include:

-  **Reducing over 2 million** single-use plastic polybags on jobsites every year
-  **Box materials are 100% kraft paper** printed with sustainable inks and minimal ink coverage

For more information about GREENPACK Bulk Pack options, visit Leviton.com/Greenpack.

YESTERDAY'S NEWS

1964—60 years ago, Dr. Charles K. Kao specified



the 10 or 20 dB of light loss per kilometer standard and illustrated that a purer form of glass could be used for long-range communication devices, a crucial step for fiber optic technology. In 2009, Dr. Kao was awarded the Nobel Prize in Physics.



Q: What is the difference between carbon neutral and net zero?

A:



Kennedy Miller
Global Program Manager,
Sustainability

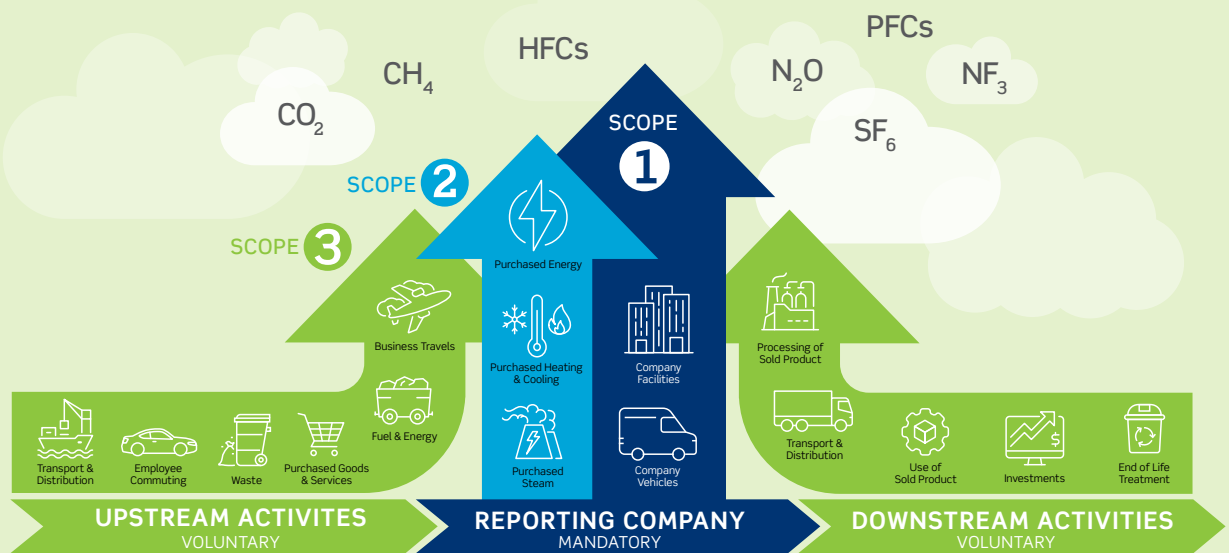
As IT and facility managers increasingly prioritize sustainability in their selection process, the need for network infrastructure manufacturers to have a clear understanding of sustainability terminology only grows.

Before understanding these terms, it's important to know that carbon neutral and net zero are based on the evaluations and reductions of a carbon footprint. A carbon footprint is the amount of carbon dioxide equivalent (CO₂e) released into the atmosphere as part of the activities of an individual, community, organization, or product.



CO₂e is a metric used to quantify the warming impact of multiple greenhouse gases (GHGs) by relating them to carbon dioxide (CO₂). This is done to consider the impact of various GHGs in terms of a single equivalent amount of CO₂.

A carbon footprint is segmented into different scopes to specify emissions sources. **SCOPE 1** describes direct emissions from owned or controlled sources, like fuel for company-owned vehicles. **SCOPE 2** is indirect purchased energy, such as the generation of purchased steam, heating, cooling, or electricity. And finally, **SCOPE 3** is all other indirect emissions in a company's value chain, such as employee commuting, use of sold products, and investments.



So, to the difference between these terms. **Carbon neutral refers to a balance that organizations strike between their produced emissions and offsets for those emissions.** To achieve carbon neutral status, all the CO₂e released into the atmosphere by an organization must first be accurately measured, then the emissions are offset through projects that avoid, remove, or absorb carbon. **Net zero goes further than carbon neutral as it negates all CO₂e from human activity.** This is achieved primarily by reducing emissions (by >90%) and implementing methods of removing or absorbing carbon from the atmosphere or the remaining emissions to achieve net zero CO₂e.



Questions?
Comments?
Ideas?

We want to hear from you!
Email: crosstalk@leviton.com