

SUSTAINABILITY

The new energy landscape creates opportunities for energy-efficient buildings

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Introducing a new energy landscape for buildings

Sustainability should be top of mind as a commercial building owner or operator. Why? Because climate continues to pose challenges to business as usual.

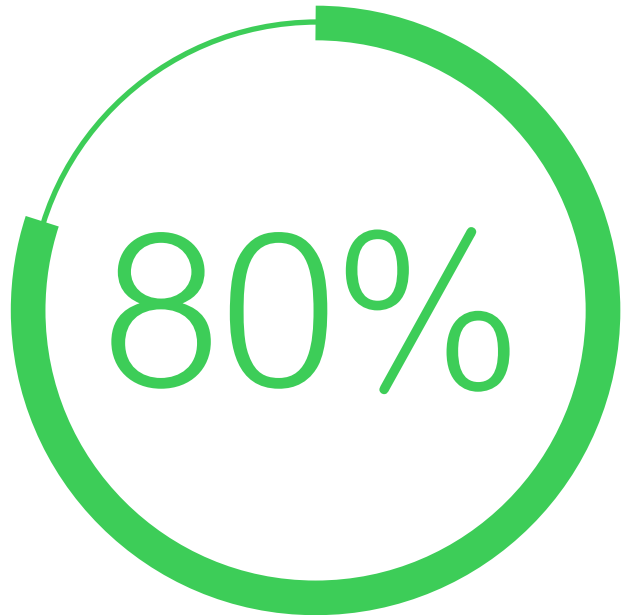
Beyond the environmental risks – like droughts, wildfires, and ocean acidification – there are organizational risks to your brand reputation, business model, and, ultimately, bottom line. You need to take action to build resilience against these risks. New build projects should be greener and more energy-efficient while simultaneously decarbonizing existing operations.

To achieve these goals, take advantage of the *New Energy Landscape*.

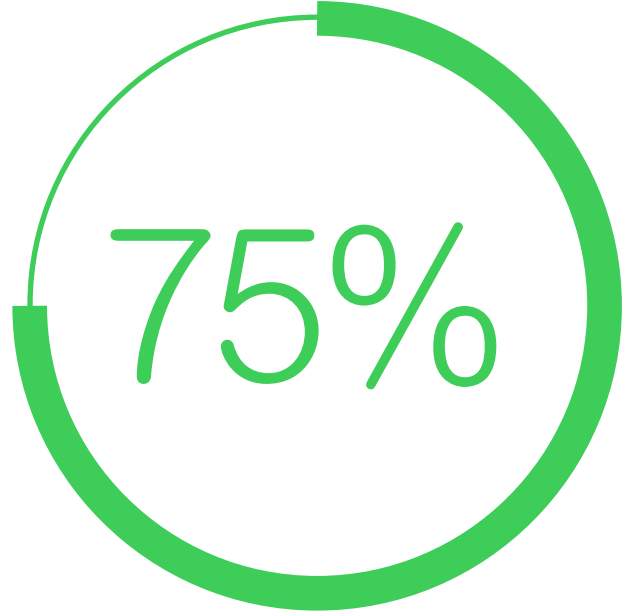
As the world moves from centralized energy distribution models to more diversified solutions, today’s smart technologies can help you leverage on-site renewable energy generation – transitioning from energy consumer to ‘prosumer’ – and use innovative ways to reduce energy consumption.

This win-win situation helps you meet new emissions regulations and reduce your energy bills while answering the demands of prospective tenants, employees, and customers for more sustainable buildings. Your buildings will also be more attractive to investors increasingly using environmental, social, and governance (ESG) scores to choose where to invest their money.³

The bottom line? Decarbonization is increasingly just good business – and there is no time to waste.



of companies worldwide report on sustainability.¹

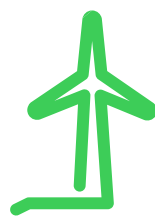



of today’s buildings are energy inefficient, yet 85-95% of them will still be in use in 2050.²


1. “The time has come, The KPMG Survey of Sustainability Reporting,” KPMG Impact, December 2020
2. “Renovation wave,” European Commission
3. “What Is ESG Investing?” Forbes Advisor, February 2022


Digital transformation is key to achieving results

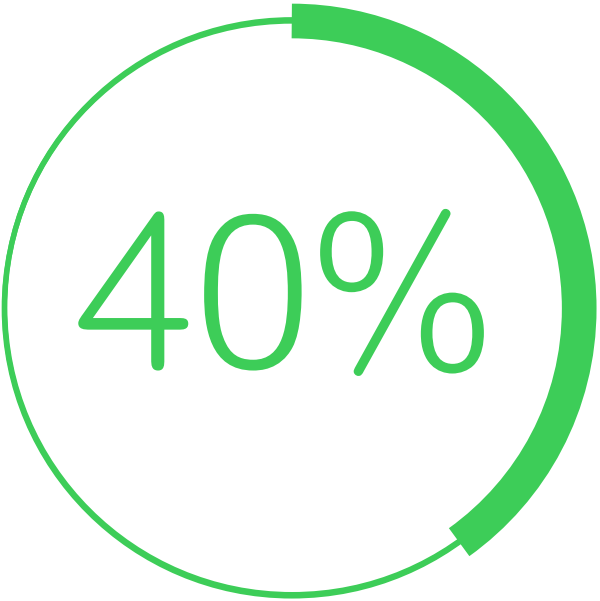
Your buildings require smart power systems connected to energy management software to accurately track and analyze electrical energy usage and handle the complexities of:

 Local energy generation

 Energy storage

 Electric vehicle charging

 Connections to the grid⁴



CO₂ emissions are generated by buildings.⁷

New building designs often neglect to include a smart, connected power infrastructure,⁵ and investment strategies for building retrofits typically overlook upgrading the electrical system to a smart power system.⁶

From building management and smart building perspectives, electrical systems are often ignored, which needs to change.

The digital transformation of electrical energy and power management is critical to helping you face these challenges. It helps simplify [active energy management](#), a holistic approach to operating sustainably, using energy efficiently, and maximizing savings. It gives you the actionable information you need to make the best decisions.



of all electrical distribution equipment is connected to software.⁸

4. [“Net Zero Carbon Cities: An Integrated Approach,” World Economic Forum report, January 2021](#)

5. [“Designing For Facility Management 2.0: Changing how digital systems are specified to achieve smart building outcomes”, Schneider Electric, September 2021](#)

6. [“Advanced Energy Retrofit Guides,” U.S. Department of Energy’s Office of Energy Efficiency and Renewable Energy](#)

7. [Energy.gov](#)

8. Global estimates from Schneider Electric Field Services organization in 2020.

Choosing the right solution

Schneider Electric provides advanced sustainability solutions, from capital expenditures (CapEx) to operating expenses (OpEx), empowering you to make the most of your energy and turn climate ambition into concrete action.

These solutions offer a proven and replicable roadmap to help your organization define, set, deploy, and sustain decarbonization programs.⁹


An essential part of that strategy is to reduce energy through digitalization and operational efficiency.


Digitizing buildings requires an integrated solution comprising connected products, energy and power management software, and cloud-based predictive analytics and services.


This provides the insights and expert support you need to quickly set sustainability goals and achieve emissions, energy, and cost savings.

⁹ [“Build it for Zero Carbon: A Roadmap to Realizing Decarbonization of Buildings.” Schneider Electric, November 2022](#)

The purpose of this guide is to make the journey easier by helping you discover the best options for digitally transforming your buildings:

 **Schneider Electric™** – A partner with decades of experience in energy and sustainability consulting and technology

 **EcoStruxure™ Power** – A complete platform to support your sustainability and efficiency goals

 **Connected products** – Devices with built-in communication that simplifies the digitization of your electrical distribution system

Elevating your energy and power management

Introducing a new energy landscape

Elevating energy and power management

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A comprehensive solution



How you can tackle the new energy landscape?

Schneider Electric will help you with a comprehensive, step-by-step approach to delivering net-zero buildings – from strategy and implementation to operation and optimization.

An EcoStruxure Power solution will enable this journey, giving your organization the data and insights needed to achieve green building certification, increase building valuation, and exceed investor and consumer expectations while contributing to a healthier planet.

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Elevating your energy and power management

EcoStruxure platform is a plug-and-play, open, and interoperable IoT-enabled system architecture.

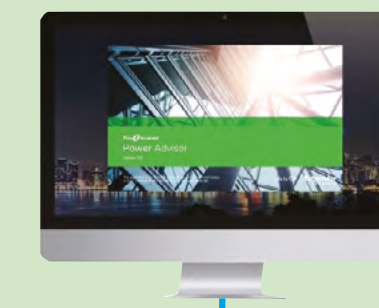
It is the foundational technology backbone that connects everything in your enterprise from the shop floor to the top floor to:

- Collect and analyze critical data from sensors to the cloud to discover meaningful insights.
- Enable actions based on real-time information and business logic.

It uses advancements in IoT, mobility, sensing, cloud, analytics, and cybersecurity to deliver:

- **Connected products** – A wide selection of intelligent sensors, metering, protection, control, and communication devices, distributed across one or more facilities and seamlessly networked together.
- **Edge control** – Software that delivers local, real-time data access and control functions for operations and maintenance personnel. Dedicated, interoperable software is available for energy and power management, building management, IT management, etc.
- **Apps, analytics, and services** – A variety of advanced, cloud-hosted capabilities enable enterprise integration and a portal to expert advisory support.

Apps,
Analytics
& Services



EcoStruxure Power Advisor



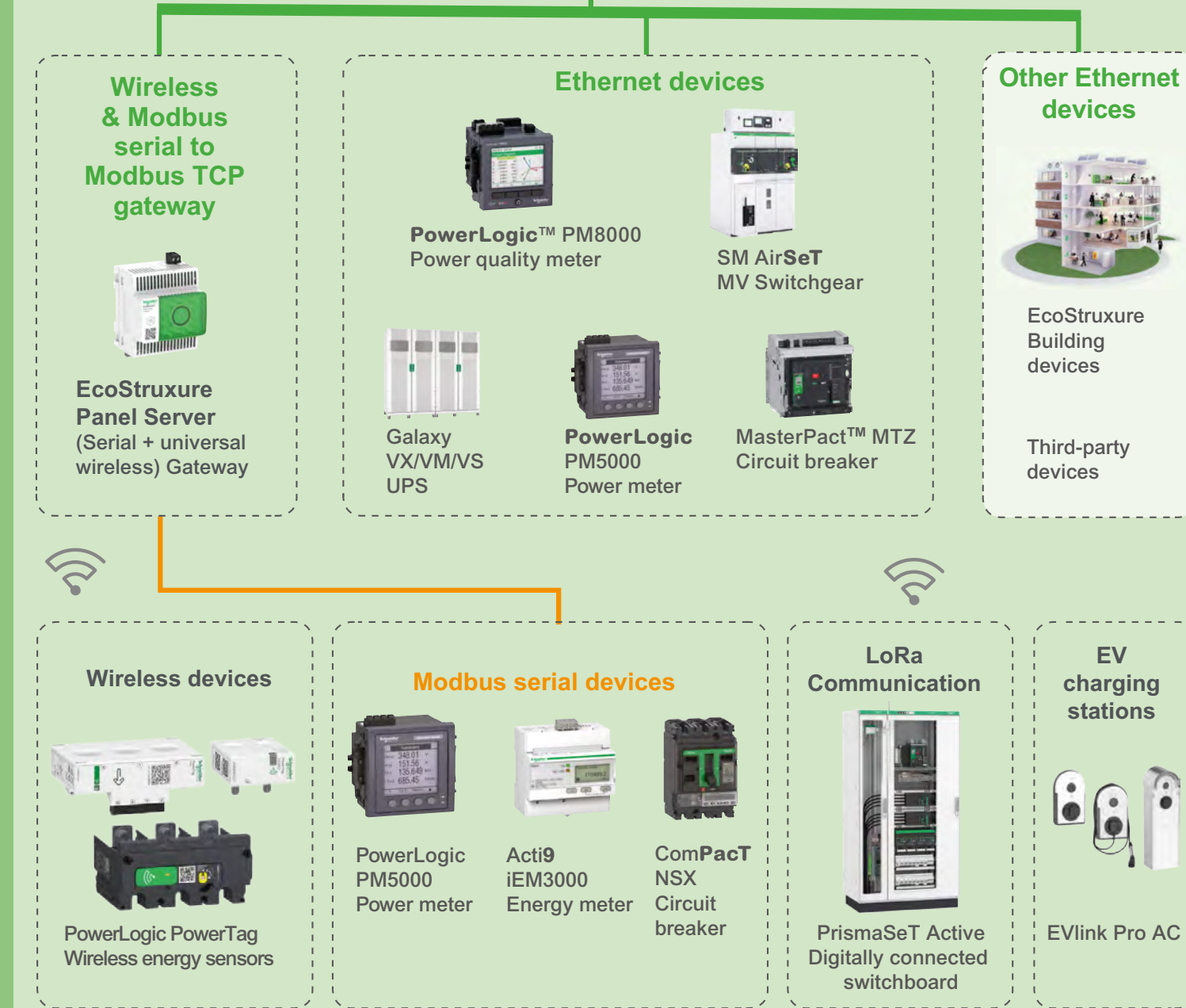
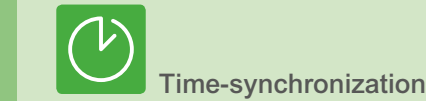
EcoStruxure Microgrid A

Edge
Control



EcoStruxure Power Monitoring Expert

Connected
Products



— Ethernet - public LAN/WAN — Ethernet - technical LAN — Serial — Wireless - 2.4 GHz



Best-in-class energy and power management

EcoStruxure Power combines best-in-class operational technology (OT) solutions with the latest information technology (IT) to digitize and simplify electrical distribution systems with:

Core tested and validated

reference architectures that help you design and implement electrical systems that:

- Comply with the newest building codes
- Achieve green building certifications
- Support active energy management programs compliant with global best practices

Actionable data to

aid decisions that help better maximize:

- Electrical safety
- Power availability
- Maintenance and energy efficiency
- Sustainability
- Power system cybersecurity

Team empowerment to

maximize energy efficiency and sustainability by helping to:

- Reduce energy consumption
- Lower maintenance costs
- Increase equipment lifespan
- Track and report carbon emissions to let you meet regulatory compliance

EcoStruxure Power is only one of the many integrated solutions from Schneider Electric, including EcoStruxure Building, EcoStruxure IT, and more. **All of these solutions work seamlessly together in a powerful, complementary way.**

Support for sustainability standards and certifications

EcoStruxure Power includes all monitoring and reporting tools and services your team needs to help follow energy management best practices, comply with local regulations, and achieve voluntary green building certifications, including:



ISO 50001, 50002, and 50006 – EcoStruxure Power architecture has obtained ISO 50001, ISO 50002, and ISO 50006 certification for comprehensive digital power management system. It establishes and tracks APIs per ISO 50006:2014.

“ISO 50001 is based on the management system model of continual improvement also used for other well-known standards such as ISO 9001 or ISO 14001. This makes it easier for organizations to integrate energy management into their overall efforts to improve quality and environmental management.”¹⁰

“Leadership in Energy and Environmental Design ([LEED](#)) is the most widely used green building rating system in the world ... Owners and project teams choose LEED certification to inform, benchmark, and celebrate their sustainability goals and achievements.” **See Table 1.**¹¹



“BREEAM is the world’s leading sustainability assessment method for master-planning projects, infrastructure, and buildings. It recognizes and reflects the value in higher performing assets across the built environment lifecycle, from new construction to in-use and refurbishment. [BREEAM](#) does this through third-party certification of the assessment of an asset’s environmental, social, and economic sustainability performance, using standards developed by BRE.”¹²



“[NABERS UK](#) is a simple, reliable system for rating the energy efficiency of office buildings across England, Wales, Scotland, and Northern Ireland. To achieve a specific NABERS Energy rating ... Design for Performance [increases the] likelihood of achieving a net-zero carbon development in operation by bridging the performance gap between design intent and operations.”¹³

10. “ISO 50001 Energy Management”, ISO

11. “What is LEED Certification?” U.S. Green Building Council

12. “What is BREEAM?” BRE Group

13. “What is NABERS UK?”, BRE Group



LEED Certification

There are several ways of obtaining LEED points and, in turn, [LEED certification](#).

Table 1. Example of a LEED certification rating sheet

Certification	Points
Certified	40-49
Silver	50-59
Gold	60-79
Platinum	80-110

The sum of points determines the level of certification.

Category	New building or Major retrofit
Location and Transportation	16
Sustainable Sites	10
Water Efficiency	11
Energy and Atmosphere	33
Materials and Resources	13
Indoor Environmental Quality	16
Innovation	6
Regional Priority	4
Sum	110

Category criteria for obtaining points changes every year.

Energy and Atmosphere	New building or Major renovation
Fundamental Commissioning and Verification	Required
Minimum Energy Performance	Required
Building-Level Energy Metering	Required
Fundamental Refrigerant Management	Required
Enhanced Commissioning	6
Optimize Energy Performance	18
Advanced Energy Metering	1
Demand Response	2
Renewable Energy Production	3
Enhanced Refrigerant Management	1
Green Power and Carbon Offsets	2
Sum	33

Energy and Atmosphere category, requirements differ for type of building project.

Contact your Schneider Electric representative to learn more

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Leveraging connected products

It can be a mystery to determine where building electricity is consumed and whether it is used efficiently or wasted.

Some buildings may have one meter showing the consumption of the entire building, but few have anything more precise than that. Without a more detailed overview of where and how energy is consumed, it is difficult to know what can be improved.

There are several ways to implement a metering system, but a good rule of thumb is: **the more meters a building has and the more advanced those meters are, the more insight and potential savings can be found.** A good start is measuring more points with greater accuracy.

Whether a new build or a retrofit project to support sustainability and efficiency goals, it is

critical to collect energy and power metering data from strategic locations throughout each building's electrical distribution system – from the service entrance to final distribution circuits. Integrated and connected products help enable this.

What kind of metering devices do you need?

There are several device choices depending on your measured parameters, accuracy, and communication needs.

Schneider Electric recommends choosing more advanced metering capabilities for mid-and large buildings – including power quality measurements – for installation at the service entrance and critical distribution points. For feeders and final distribution, simpler energy metering can be used.



Metering should be compliant with international and local standards. For example, the IEC 60364-8-1 standard helps you select the best metering capabilities to support energy management best practices, such as those defined by the ISO 50001 standard.¹⁴

14. "Designing electrical systems for future-proof, energy-efficient green buildings," Schneider Electric, 2019

How do I connect devices in a network?



More advanced devices are typically connected directly to your building's Ethernet network for maximum data bandwidth.

Simpler metering devices can connect by serial wired connections, such as Modbus or over wireless links, which helps save on installation time and costs for high numbers of metering points.












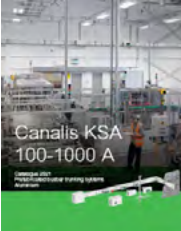
Wireless networks often require a wireless-to-Ethernet gateway. Gateway functionality can be offered as a standalone device (e.g., [EcoStruxure Panel Server](#)) or integrated as part of the newest electrical panels (e.g., [PrismaSeT Active](#)).

The following table provides a brief selection of **devices that collect energy consumption and power data** throughout your buildings and gateways to help seamlessly network all your devices via on-premise software or the cloud.





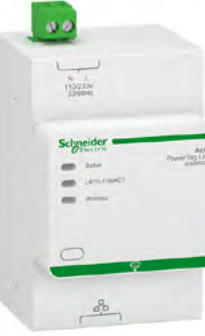

Metering

Offer Type	Offer	Product Description	Click for Product Details	Learn More
Stand-alone power meter	PowerLogic™ PM8000 and PM5000	<ul style="list-style-type: none"> • Measure power and energy data • Analyze power-quality conditions • Identify under-performing electrical assets • Analyze the event sequences with millisecond-accurate timestamping • Identify the root cause with patented disturbance direction detection <p><i>Note: For hospitals, data centers, airports, and other critical facilities, consider the PowerLogic ION series metering products, ideal for service entrances or critical distribution points</i></p>		



Metering (continued)

Offer Type	Offer	Product Description	Click for Product Details	Learn More
Embedded metering with protection device (ACB, MCCB)	MicroLogic™ for MasterPacT and ComPacT	Enhanced electronic circuit protection is integrated within each circuit breaker, including: <ul style="list-style-type: none"> • Comprehensive and integrated measurement • Preventive and predictive maintenance • Design for use in ComPacT and MasterPacT circuit breakers from 40 A to 6300 A 	 	 
Embedded metering with protection device (MCB)	Acti9 Active VigiARC	An all-in-one protection device within a compact format providing access to data through digitalized services for more efficient maintenance and business continuity		
Embedded metering with protection device (MV switchgear)	SM AirSeT	A monitoring medium-voltage (MV) switchgear with powerful and scalable IoT capabilities provides: <ul style="list-style-type: none"> • The ability to analyze data on services condition • Anticipation of premature maintenance of the installations • Improved uptime and operational efficiency for greater durability 		
Wireless energy meter for MCB, MCCB	PowerLogic PowerTag	Compact energy sensors that integrate with Acti9 and ComPacT electrical protection devices to: <ul style="list-style-type: none"> • Accurately measure current, voltage, power, power factor, and energy • Wirelessly communicate data via a gateway • Send alerts in the event of an electrical anomaly 		
Busway for simple metering integration	Canalis	<ul style="list-style-type: none"> • Simplifies power distribution • Provides reliable power supply with easy-to-integrate metering solutions 		

Gateways

Offer Type	Offer	Product Description	Click for Product Details	Learn More
Switchboard with embedded gateway	PrismaSeT Active	<p>Newest generation of digitally-connected, low-voltage (LV) switchboards for power distribution, with an integrated LPWAN gateway in the panel, allowing you to:</p> <ul style="list-style-type: none"> • Connect up to 15 wireless sensors to the cloud • Commission faster with efficient installations • Optimize maintenance and improve uptime with real-time smart alarms 		
Panel server	EcoStruxure Panel Server	<p>The next-generation gateway provides a seamless connection of wired or unwired smart IoT devices to edge control software or advisor services</p>		
Gateway for wireless energy meter (MCB, MCCB)	Acti9 PowerTag Link	<p>An Ethernet connection concentrator for wireless devices with:</p> <ul style="list-style-type: none"> • Data display and webpages • PowerTag energy sensors and control modules 		

eMobility

Offer Type	Offer	Product Description	Click for Product Details	Learn More
EV charger	EVlink™ Pro AC Charger	<p>A reliable, sustainable, and smart charger for increased efficiency that is fast to install and easy to operate and maintain, minimizing costs and downtime</p>		

Connecting with energy management software

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solution



Connecting with energy management software

EcoStruxure Power Monitoring Expert

is software designed for on-premise or cloud-hosted energy and power monitoring and analysis.

It is purpose-built for medium- and large-sized buildings to help your facility team keep power reliable and efficient.

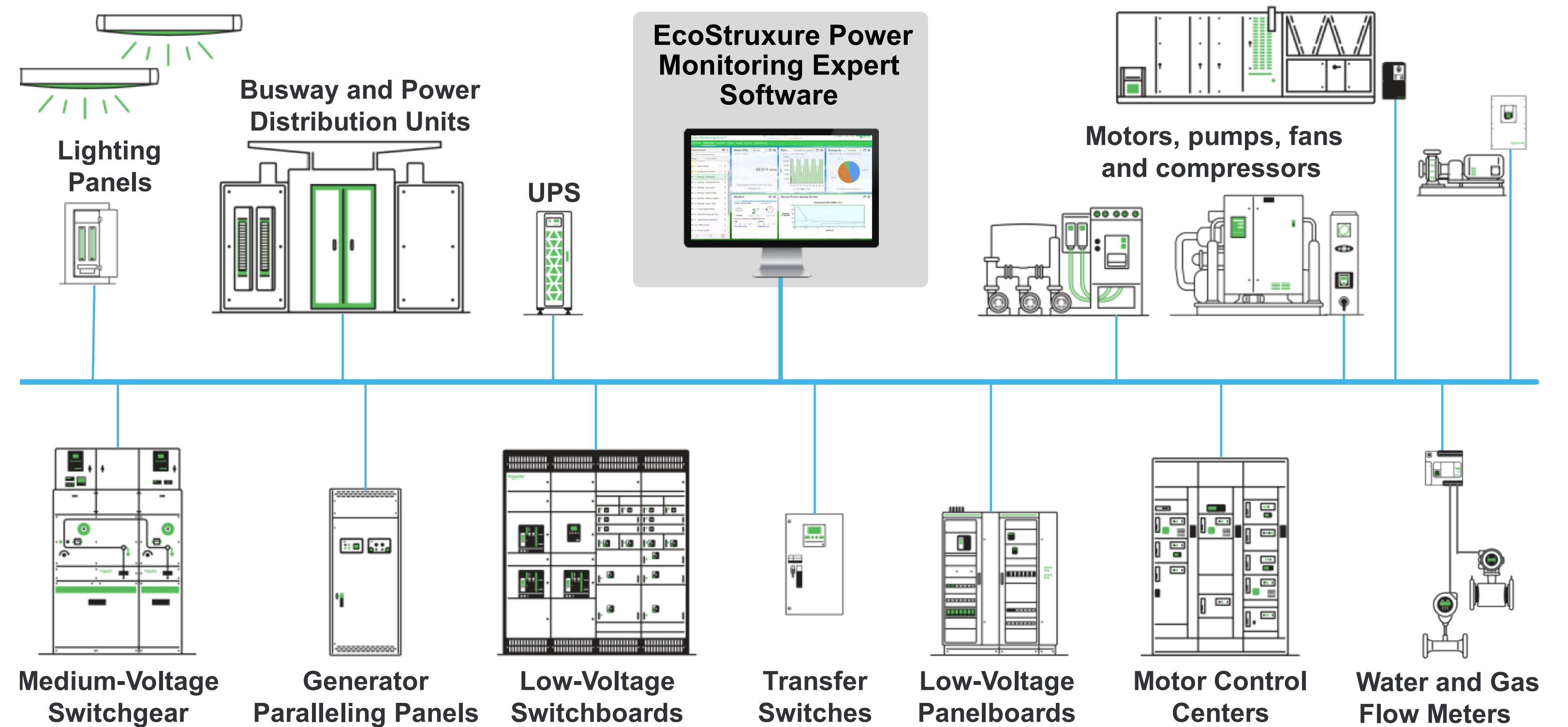





Figure 1. Common types of equipment that can be connected to EcoStruxure Power Monitoring Expert software

The insights you need to take action

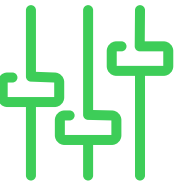
Convert data into actionable information to reveal risks and opportunities to unlock your building’s full potential. [EcoStruxure Power Monitoring Expert’s](#) advanced dashboards, energy visualization, and analysis tools seamlessly integrate for overarching building management that provides the insights you need to support informed decisions.


 **Access real-time data and alerts** continuously from meters, circuit breakers, and other devices in all electrical panel boards and lighting panels.


 **Monitor and analyze** the performance of all energy assets – including loads and on-site power generation – to support proactive maintenance, saving you time and money while extending lifespan.

 **Track and report** energy-related carbon emissions – represented by tons of CO₂, saved trees, etc. – segmented by source, scope, and pollutant.

 **Reveal unused system capacity** to help avoid upgrading or overbuilding.

 **Use energy modeling**, forecasting, and KPIs to quickly find ways to save money by uncovering abnormal or wasteful energy usage, allocating costs to evaluate operations, and using baseline comparisons to validate savings from upgrades or other initiatives. Integrate analyses for all utilities: water, air, natural gas, electricity, and steam.

 **Perform accurate shadow billing** to reveal expensive utility bill errors, considering complex rates, surcharges, and penalties.

 **Enable demand response program participation** by tracking consumption patterns and managing loads.

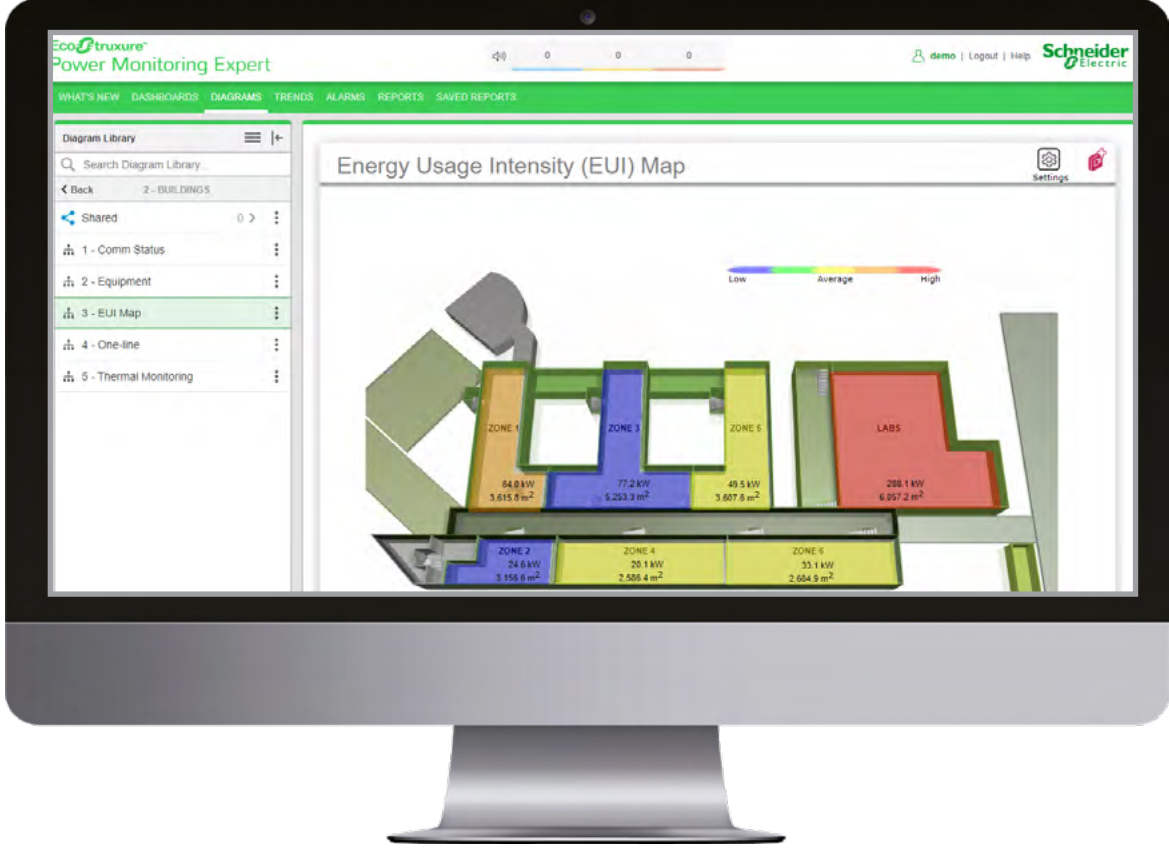


Figure 2. Energy Usage Intensity Map

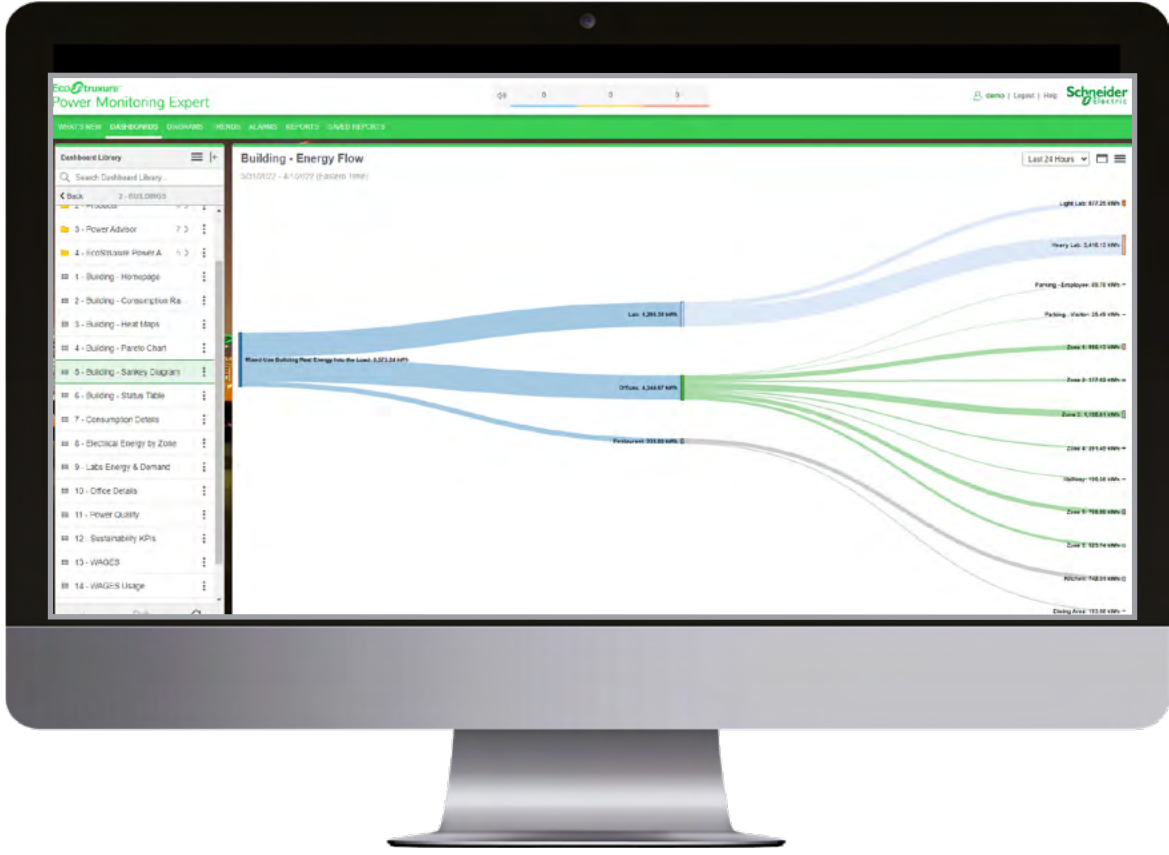


Figure 3. Sankey Diagram



Simplify reporting and compliance

A single business can generate millions of compliance data points quickly. With [EcoStruxure Power Monitoring Expert](#), you can aggregate this data across multiple processes or facilities and generate compliance reports that meet ever-changing standards, such as:

- **Alignment with international energy efficiency standards** and simplifying compliance with green building ratings and certifications.
- **Compliance with standard IT practices** (e.g., password management, white-listing, preferred browser) and alignment with cybersecurity best practices (e.g., IEC 62443 4-1 and 4-2 SL1 Certified).

Helping ensure power resilience

EcoStruxure Power Monitoring Expert also helps you:

- **Track** electrical system health and safety, giving early warning of resilience risks – e.g., capacity overloads, faults, arc-flash, high temperatures, breaker aging, and more.
- **Analyze** and isolate root causes quickly and restore power in the case of an outage.
- **Verify** utility/grid service and internal compliance with power quality standards (e.g., EN50160, IEEE519, ITIC).



Supporting advisory services

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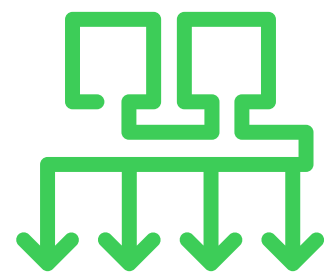

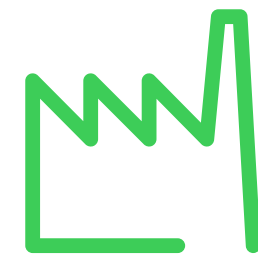



Supporting advisory services

Actively managing your power, energy, and emissions can seem like a big commitment. Your facility teams may already have a full plate without the resources or the expertise to take on more. Or, you may simply want help getting to your sustainability goals faster.

[EcoStruxure Power Advisor](#) is a connected service designed to proactively manage your power management and power distribution systems with remote consultancy, support, and on-site maintenance.

Our advanced algorithms combined with expert advice provide:

<p>Continuous, remote monitoring of the health of your power monitoring system, identifying and alarming on any gaps or issues with data quality to help ensure operators do not receive more notifications than they can reasonably manage.</p>		<p>Data analysis for energy performance reporting, sub-billing, and energy and emissions audits.</p>	
<p>Help to implement proactive maintenance plans that continuously monitor energy asset conditions and improve performance based on energy audits.</p>		<p>Green building certification support by helping you understand how an EcoStruxure solution can help you achieve points toward LEED certification or other popular rating systems.</p>	

EcoStruxure Microgrid Advisor – optimize on-site energy to reach net-zero faster

Combining smart connected devices, energy and power management software, and expert services can help you significantly improve your energy efficiency and sustainability. **But to achieve net-zero performance or even net-positive, you need to consider becoming a ‘prosumer’ by producing and consuming your green energy.**

Energy resources can include solar panels, wind turbines, and energy storage. There are many applications and benefits to consider, depending on your building(s), your business, the region you are in, and other factors:



Tariff management – using on-site renewable energy at the most advantageous time, based on variable tariff rates (i.e., self-consuming or selling renewable electricity to the grid when grid prices are high, and consuming or storing grid energy when prices are low).



Peak shaving – consuming renewable energy to avoid demand penalties due to grid energy consumption exceeding a certain level for a given hour.



Reduce your carbon footprint – maximizing the self-consumption of on-site renewable energy production to reduce your equivalent emissions.

Note: The adequate amount of greenhouse gas reduction will depend on the grid's percentage of 'green energy.'

Choosing the right microgrid solution

Getting the most out of on-site energy resources requires technology that can intelligently connect, monitor, and control them.

EcoStruxure Microgrid Advisor is a tailored platform that enables you to dynamically control on-site energy resources and loads. The software seamlessly connects to your energy resources to automatically forecast and optimize how and when to consume, produce, and store energy. It helps improve economic performance, sustainability, and resilience at your site by providing:

- **A single, cloud-based platform** that connects, monitors, and controls all distributed energy resources (DERs), including PV, wind, EV charging, batteries, or backup generators, from one interface.
- **Model Predictive Control algorithms** that enables the microgrid's optimization strategy across dynamic use cases such as tariff management, demand charge reduction, grid ancillary services, or optimized self-consumption.
- **The local edge controller**, which interfaces with the DER for monitoring and control and enables the run of real-time use cases (<1s), such as frequency regulation or demand response.
- **A cutting-edge web-based user interface** that communicates your real-time energy use, savings, and CO₂ emissions data.

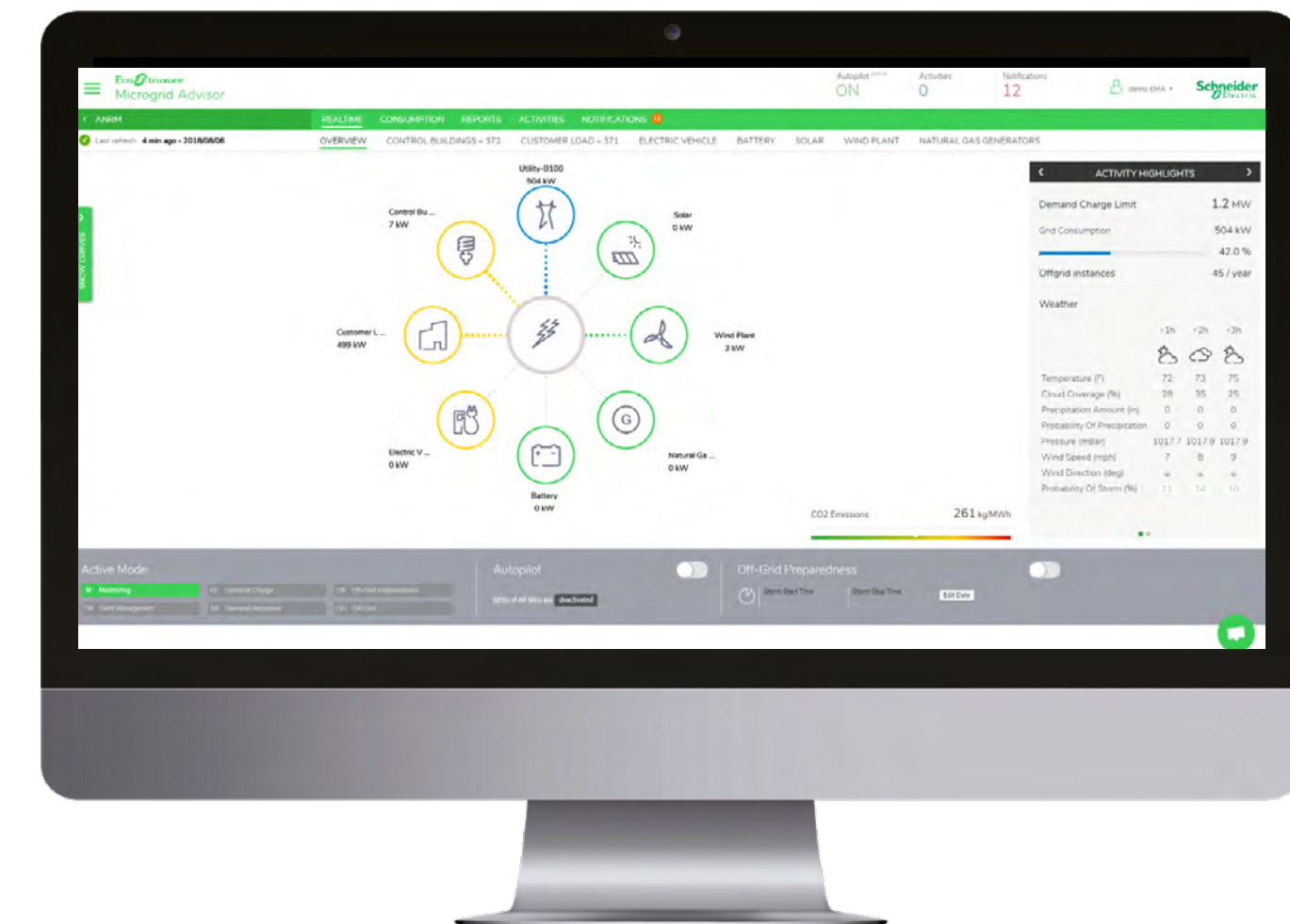


Figure 4. Real-time energy flow



Figure 5. Electrical active energy management overview



Ready to take the next step?

The selection and use of on-site energy resources need careful planning. This will include a preliminary study and cost-benefit analysis of different types of renewable energy sources and storage options as well as help to:

- **Properly size** energy resources.
- **Regain your investment** within the shortest possible payback period.
- **Gain site approvals**, determine the most effective location for solar panels, and consider the impact of wind turbines on birdlife, etc.

The experts at Schneider Electric and our **EcoXpert™ partners** will help you audit, design, manage, and maintain the best possible microgrid project for each site or campus.

We deliver customized, cost-effective, turnkey solutions.



Your comprehensive solution

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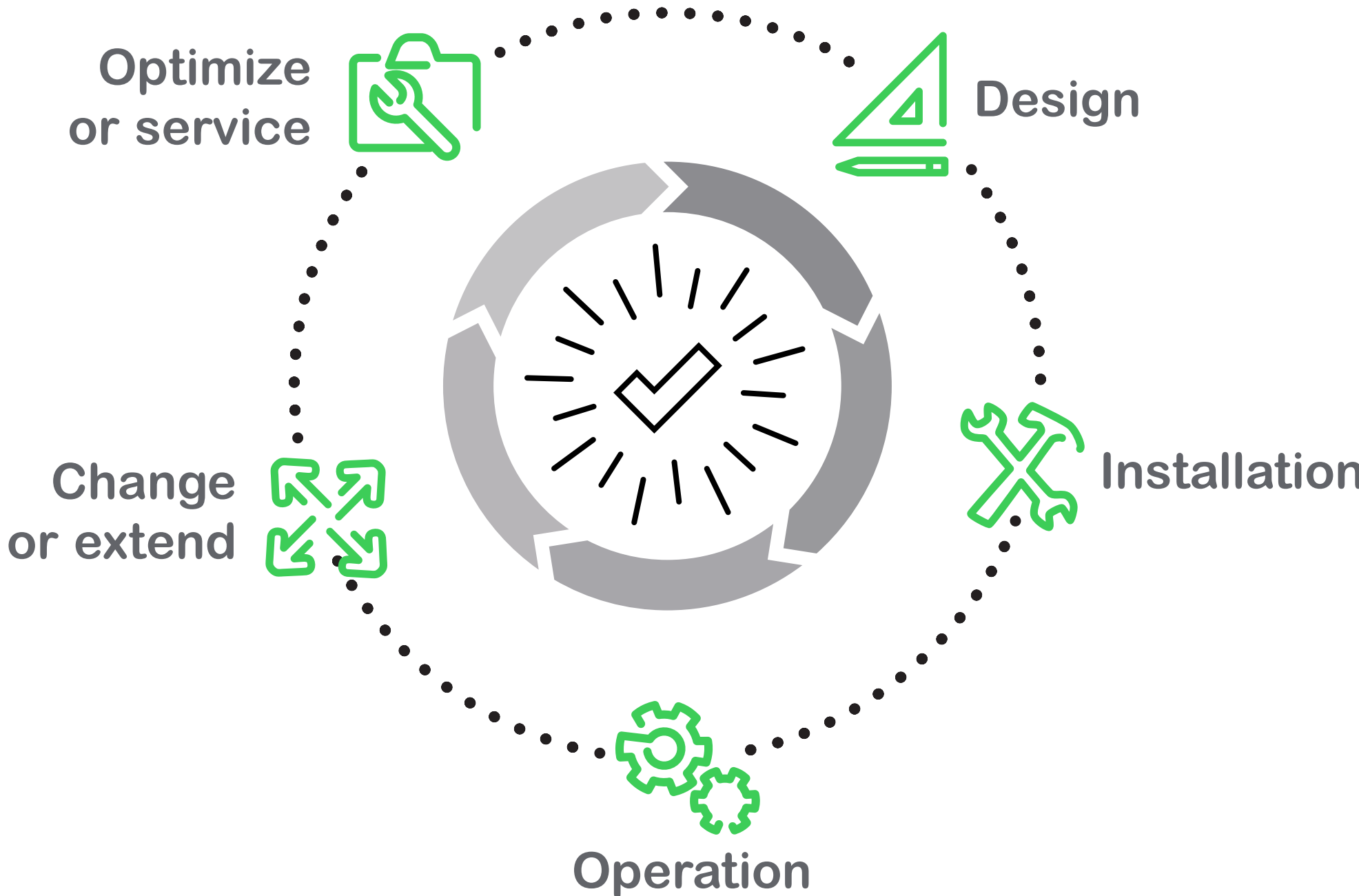


Your comprehensive solution

Schneider Electric recommends a comprehensive approach to delivering net-zero buildings – from strategy and implementation to operation, optimization, and green building certification. This approach requires a digital transformation of new and existing buildings.

With a comprehensive portfolio of strategic and tactical solutions for decarbonization – from CapEx to OpEx – Schneider Electric is an unparalleled partner for any organization.

Schneider Electric will help you turn climate ambition into action, keeping you informed and in control, while adding efficiency and sustainability throughout the lifecycle.



20%
Average energy and maintenance costs savings¹⁵

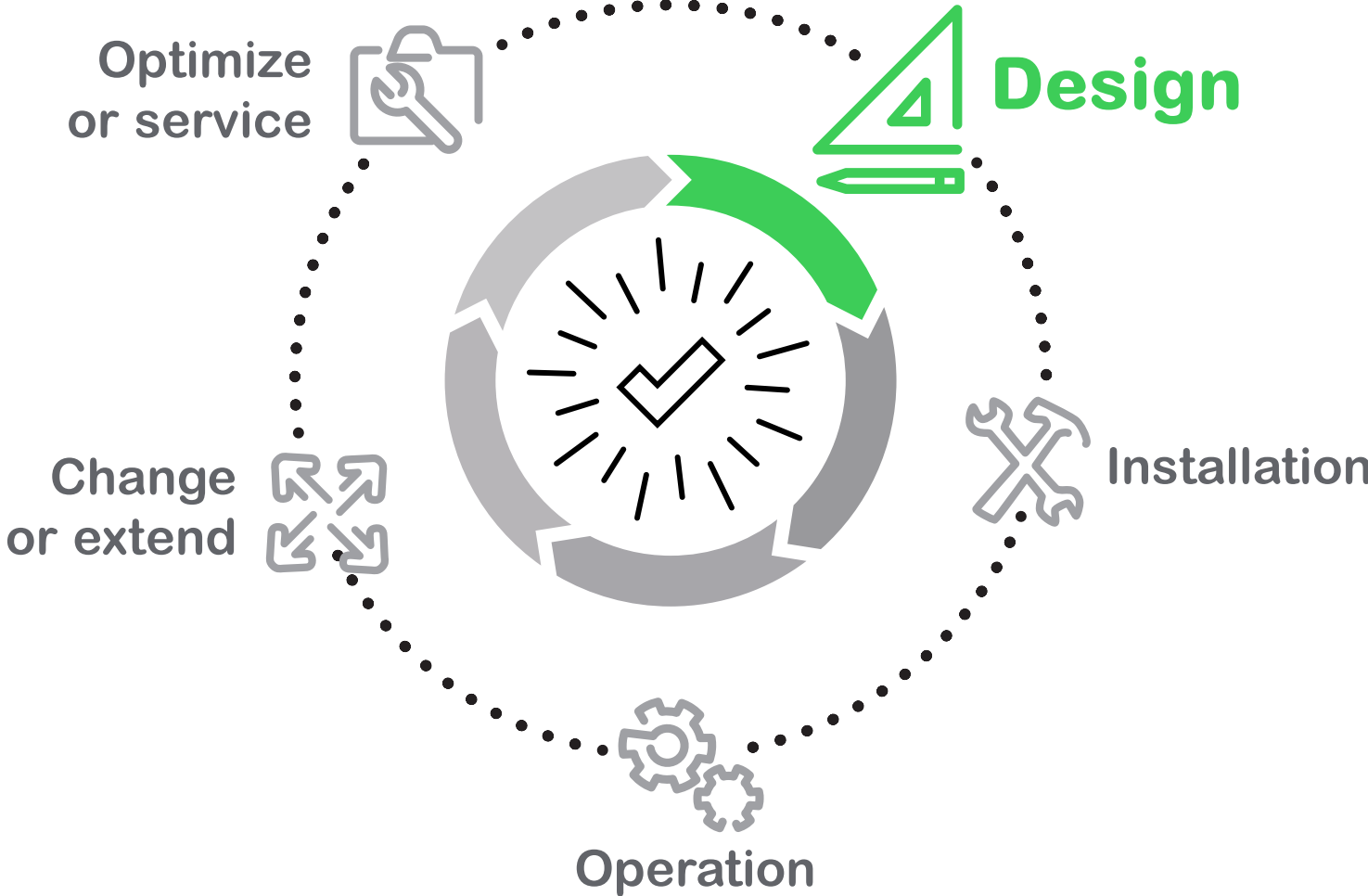
20%
CO₂ footprint optimization average¹⁶

15. 2019 Digital Transformation Benefits Report; Schneider Electric

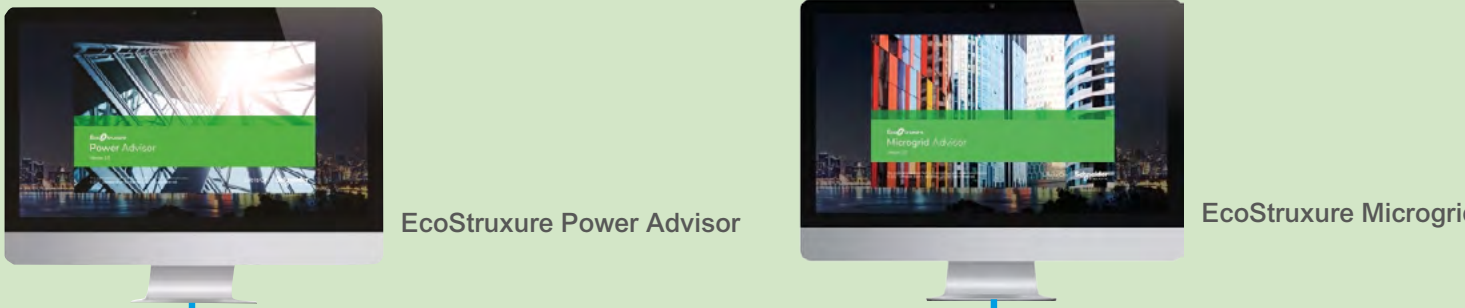
16. 2019 Digital Transformation Benefits Report; Schneider Electric

Specifying for sustainable new energy landscape	Existing installation	New installation or large retrofit
Perform energy audit	X	
Set building energy efficiency performance targets according to methodologies such as LEED, ISO 50001, or according to the type of building and national regulation	X	X
Design electrical installation according to IEC 60364-8-1		X
Measure and store periodically: Total building energy consumption, renewable energy production and consumption, EV charging consumption, HVAC consumption, and lighting consumption	X	X
Select power monitoring devices according to IEC/EN 61557-12	X	X
Include local decarbonization sources according to IEC 60364-8-82	X	X
Install building management systems according to EN1532	X	X
Install electrical energy management system compliant with standard IT practices (e.g., password management, white-listing, preferred browser, etc.) and aligned with cybersecurity best practices (e.g., IEC 62443 4-1 and 4-2 SL1 Certified) to: <ul style="list-style-type: none"> - Monitor and analyze all energy asset performance – including loads and on-site power generation - Track and report energy-related carbon emissions 	X	X

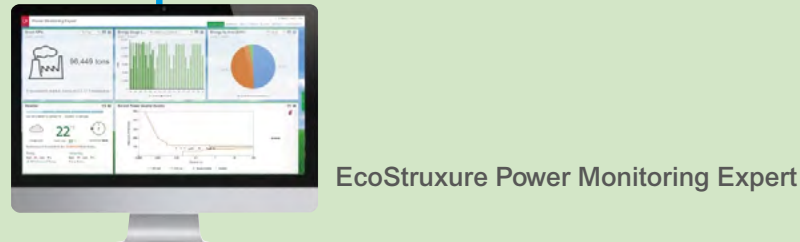
Schneider Electric helps [consultants, designers, and engineers](#) deepen their knowledge and expand their expertise through our technical assistance and useful resources.



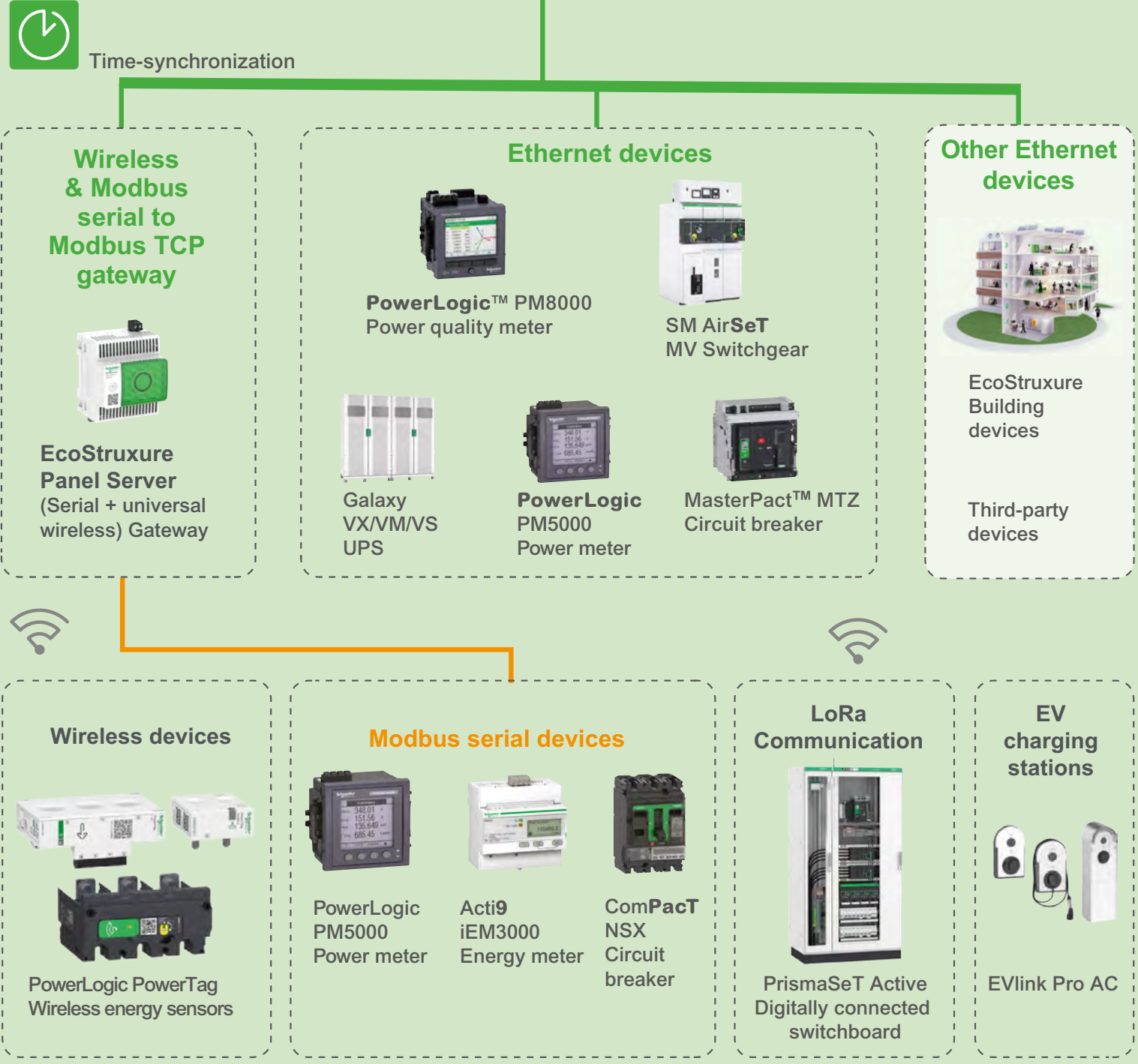
Apps,
Analytics
& Services



Edge
Control

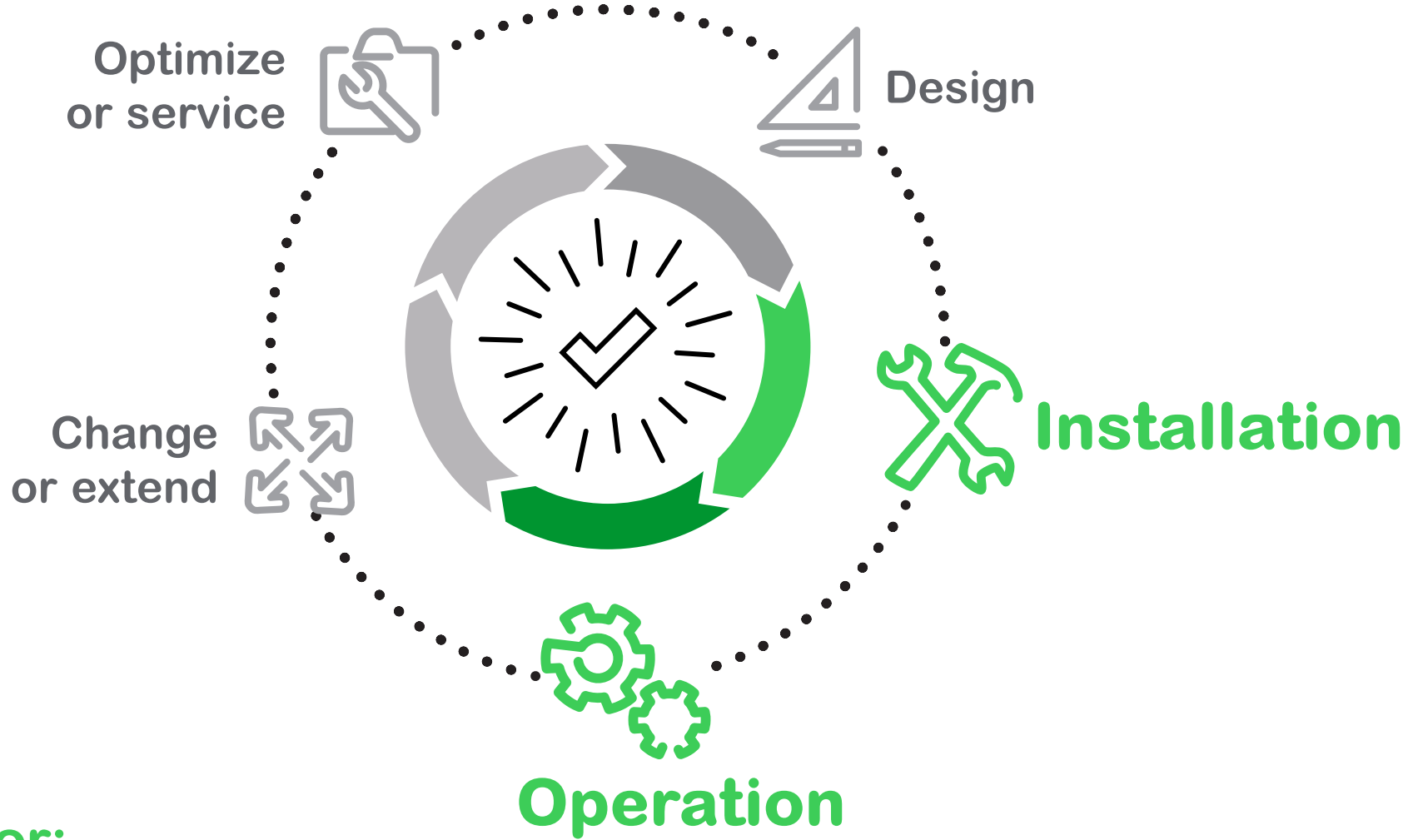


Connected
Products



A comprehensive offer for your needs

For installation and operation, Schneider Electric electrical panels offer advanced protection and seamless integration with energy management systems for sustainability. Our broad selection of components and complete technical support allow you to deliver quickly and efficiently for you and your customers. You can digitalize your electrical panels to take them to the next level by connecting with our software suite for a more sustainable solution.



Join our partner program for:

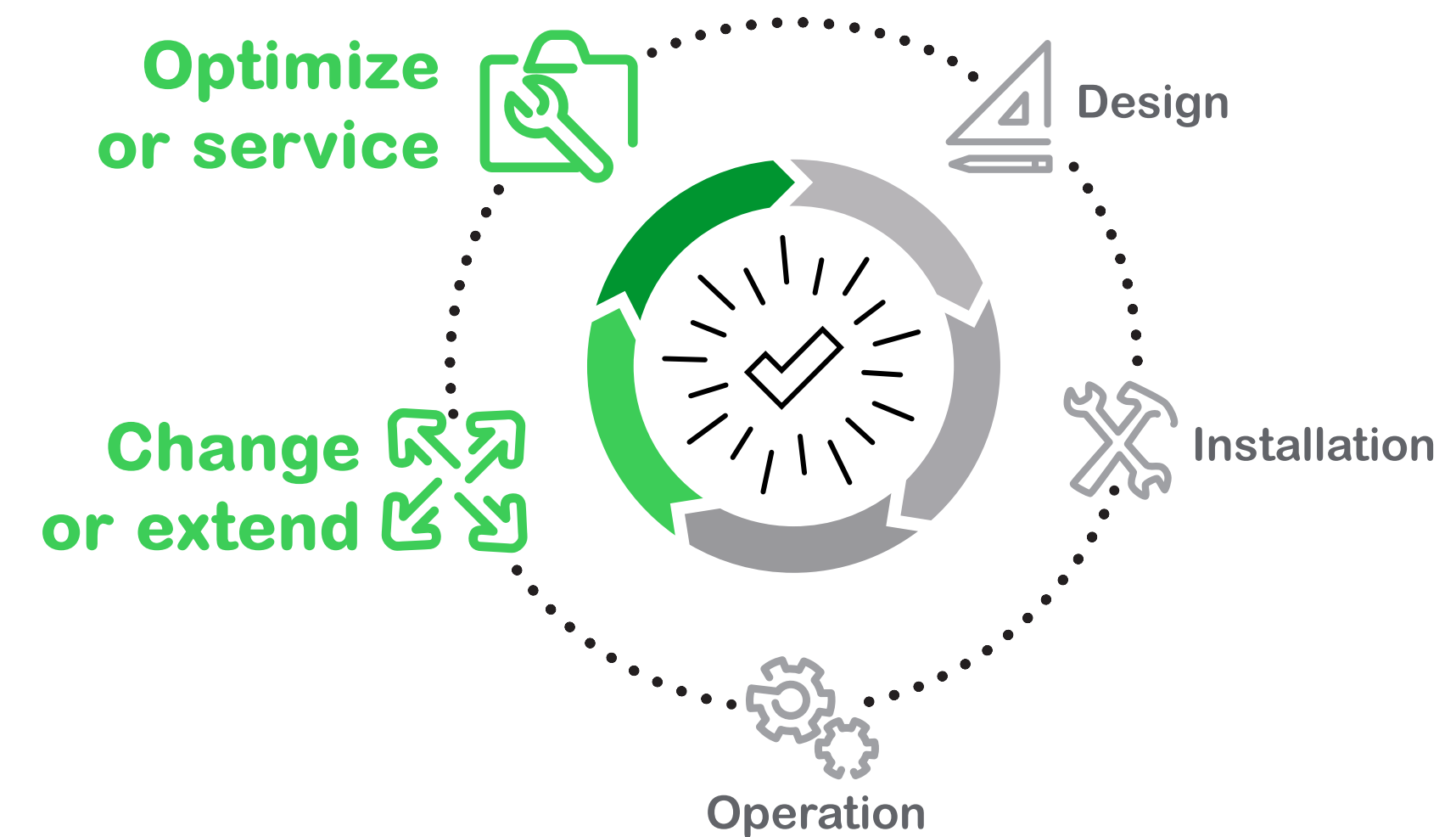
- [Electrical contractors](#) to get access to the latest offers and cut time on quotes, delivery, and installation.
- [Panel builders](#) to access the resources and training you need to win more business and help you get more done.



Let Schneider Electric experts be your guide

Energy management and sustainability can be complex topics, and Schneider Electric is here for you.

To learn more about how to get a competitive advantage, or if you have a question about an energy or sustainability challenge you are facing, contact [EcoStruxure Energy and Sustainability Services](#) for new buildings.



For current installation, Schneider Electric's [Services' Experts](#) and partners are dedicated to extending the life of assets and systems while making your operations safe, efficient, and resilient everyday.

Case Study – IntenCity: possibly the world’s most energy-efficient building

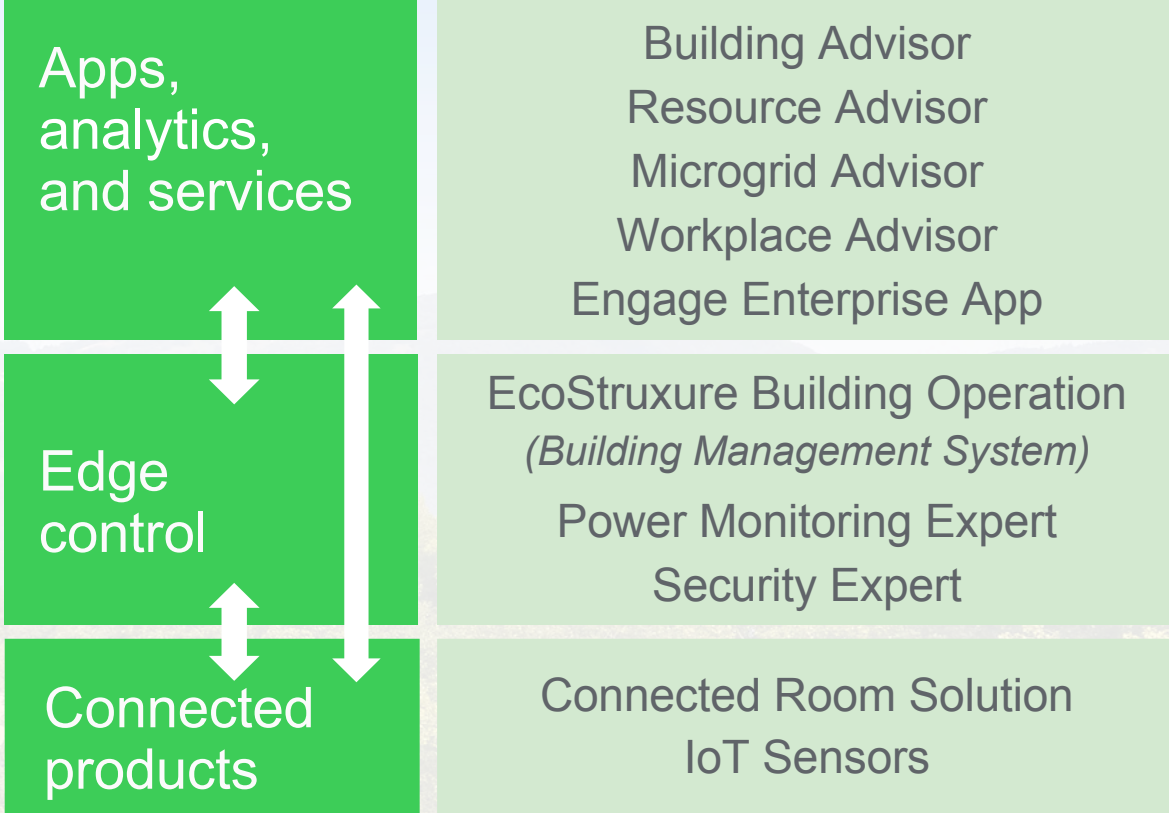
The Schneider Electric IntenCity office in Grenoble is on the path to LEED Platinum certification and may score enough credits to be recognized as the greenest and most efficient building in the world.

IntenCity is a learning building that uses innovative applications to:

- Adapt energy consumption in real-time
- Avoid unnecessary consumption
- Optimize energy flexibility

It is a place dedicated to the well-being of occupants and visitors while being fully connected and interconnected to its neighborhood, able to store the on-site renewable energy produced and defer its consumption for the benefit of neighboring buildings.

[More information](#)



Key figures

- Area: **26,000 m²**
- Capacity: **1,500 people**
- **4,000 m²** of photovoltaic panels
- Energy consumption: **37 kWh/m²/year**

Introducing a new energy landscape

Elevating energy and power management

Leveraging connected products

Connecting with energy management software

Supporting advisory services

A comprehensive solution



Case Study – Technopole: a showcase for Buildings of the Future

The Schneider Electric Technopole building is LEED Platinum certified and received the Smart Building Green Solutions Award from the Construction21 network in France.

Designed using building information modeling (BIM), two digital twins – the original design vs. the actual operational facility – have guided optimizations to bring the building's performance closer to the original plan.

The result?

- An improvement from 90 kWh per m² per year to only 55 kWh per m² per year.
- EcoStruxure Building and EcoStruxure Grid solutions make Technopole an intelligent, high-performance, smart-grid-ready building.
- Connected devices, state-of-the-art control, and smart services help continuously improve building operations and costs while enhancing occupant comfort and productivity.

As an actual 'living lab,' Technopole showcases how today's technology can enable the transformation of [Buildings of the Future](#).

Key figures

- Area: **11,000 m²**
- Energy consumption: **55 kWh/m²/year**
- LEED Operations certified: **91 points**
- LEED Design Build + Construction: **83 points**

Follow the leader – the world’s most sustainable company

Schneider Electric empowers you to make the most of your energy and resources and achieve your goals.

Schneider Electric has established itself as a leading expert in sustainability and decarbonization:

- ✓ Ranked the world’s most sustainable company by Corporate Knights in their [2021 Global 100 Index](#)
- ✓ Named the #1 largest corporate consultant on renewable energy purchasing, with 60% market share in the U.S., the most active market to date, and have advised on large-scale renewable energy contracts in 8 countries across 4 continents
- ✓ Earned The Climate Group’s inaugural [Clean Energy Trailblazer award](#) for efforts in 2020

Schneider Electric is committed to carbon neutrality by 2025 and net-zero operations by 2030, surpassing the traditional 2050 target. They have a long-standing strategy to embed ESG considerations into every facet of operations and assist their customers and business partners in achieving their sustainability objectives.

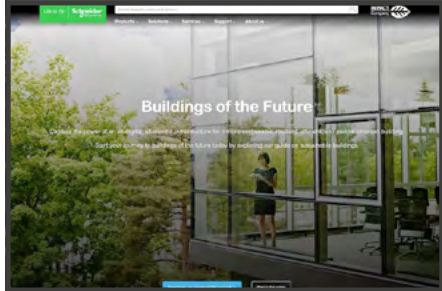
Velux, Alfa Laval, and DuPont are only a few of those who have recently trusted us in helping them accelerate the delivery of their sustainability goals.¹⁷

17. Schneider Electric’s third-quarter sustainability progress focuses on urgent climate action and meeting 2021 full year commitments

Additional resources



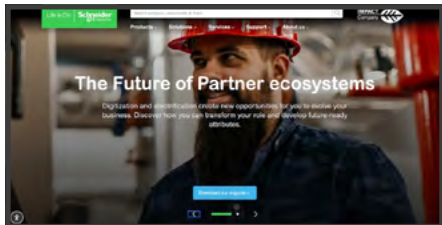
[Build it for Zero Carbon: A roadmap to realizing decarbonization of buildings](#)



[Buildings of the Future](#)



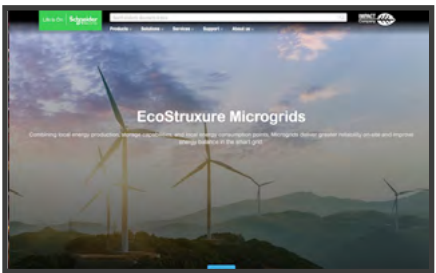
[White paper – Doing More With Less: Moving power and building management to the cloud](#)



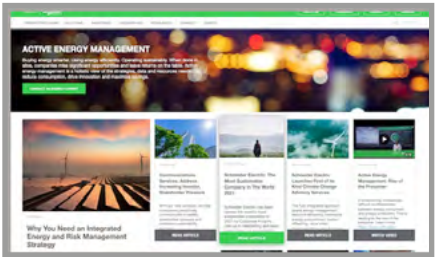
[Partnerships of the Future for electric business](#)



[Green and Circular Guide](#)



[EcoStruxure Microgrids](#)



[Active Energy Management](#)



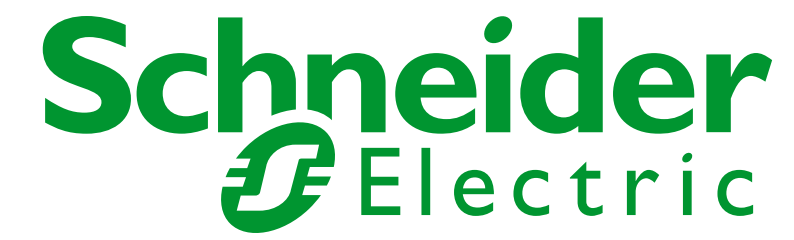
[White paper – Green Premium™](#)



[Sustainability Training](#)



Life Is On



To learn more information about how Schneider Electric can help you transform your buildings to meet sustainability goals, visit:

se.com



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