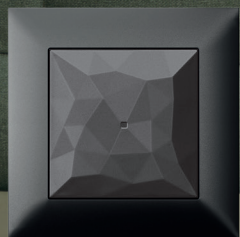




Experience  
energy  
efficiency  
with Legrand



LIGHT+BUILDING 2024  
IN FRANKFURT

PRESS KIT



#LegrandImprovingLives

 **legrand**<sup>®</sup>



# Summary

## Intersecting views

- Legrand at the heart of sustainable construction

## Responding to the world's challenges

- Energy efficiency research in buildings, an imperative

## For a low-carbon society

- Legrand more committed than ever

## LIGHT+BUILDING

- The Legrand booth

## Solutions for improving energy efficiency in the residential sector

- A Legrand solution for every requirement
- Taking action on your energy consumption on a daily basis with HEMS
- Optimising energy efficiency at home with Legrand connected solutions

## Solutions for improving energy efficiency in the service sector

- Be more energy efficient

## Solutions for improving energy efficiency in data centres

- Offering service continuity with Legrand connected UPS
- Guaranteeing a good power supply and equipment monitoring with Raritan PDUs

# Intersecting views

## Legrand at the heart of sustainable construction

With environmental, climate and energy issues driving new, more energy efficient consumption patterns, research into energy efficiency in buildings is more important than ever.

As a part of the construction ecosystem, Legrand is committed to this challenge. Benoît Coquart (Chief Executive Officer), Frédéric Xerri (Executive VP Europe), Virginie Gatin (Executive VP Corporate Social Responsibility) and Alexandre Menu (Head of Energy Efficiency) break down how the Group contributes to tackling this challenge for you. Deeply rooted in its offering, this response is one of Legrand's strategic priorities, as well as the mainstay of its fundamental purpose and its social and environmental responsibility.



**BENOÎT COQUART**  
Chief Executive Officer



**FRÉDÉRIC XERRI**  
Executive VP Europe

*“Energy efficiency research is one of Legrand's priorities.”*



**VIRGINIE GATIN**  
Executive VP Corporate  
Social Responsibility



**ALEXANDRE MENU**  
Head of Energy Efficiency

### How is Legrand involved in energy efficiency in buildings?

**BC :** Legrand stands for more than 150 years of innovation for everyone. For improved simplicity and comfort, for greater security, and for better energy efficiency in buildings. Energy efficiency is part of our purpose: with our offerings, we improve lives by providing a response to technological, societal and environmental challenges. We also support the development of sustainable buildings.

**VG :** Rising to the challenges of the world around us, particularly the climate emergency, we are committed to ensuring a more sustainable future for the generations to come every day. Energy efficiency is therefore central to our corporate responsibility. In order to limit our impact on the environment, we intend to reduce our own CO<sub>2</sub> emissions and support our clients in reducing theirs by developing solutions which improve the energy efficiency of buildings. We are also accelerating our shift towards the circular economy, with new ways of designing and producing our products, as well as selling them. All this is Legrand's energy efficiency approach!

### How does Legrand contribute to improving energy efficiency in buildings?

**FX :** Our energy efficiency offering allows us to provide a solution for every requirement and for all types of building, whether in the residential or service sector. Measuring consumption, controlling energy management systems, managing heating, optimising charging for electric vehicles, managing lighting, managing the relationship between photovoltaic energy production/consumption, improving energy efficiency for hotels, guaranteeing service continuity...: there is a Legrand energy efficiency solution to meet every need.

**AM :** It is this unique range of products, solutions and systems, which we will be presenting at Light+Building 2024, that allows us to facilitate improvements in energy performance for our clients and users. The Legrand offering is simple, innovative and sustainable, and is equally suitable for new construction and renovation. It is also an evolving and interoperable offering, integrating into a wide range of environments where solutions are already present.



# Responding to the world's challenges

## Energy efficiency research in buildings, an imperative

Ecological transition, rising energy requirements, increased regulation, comfort requirements, economic concerns: improving energy performance in buildings constitutes a major challenge for the world.

### The urgency of the climate and energy challenge

Against a background in which 40% of energy consumption and 40% of global CO<sub>2</sub> emissions originate from buildings, energy efficiency research is a priority now more than ever. This concern is further reinforced by rising energy costs, which significantly increase energy bills for households and businesses.

**40%** OF CO<sub>2</sub> EMISSIONS IN THE WORLD  
ARE GENERATED BY THE BUILDING SECTOR

SOURCE: INTERNATIONAL ENERGY AGENCY

### Focus on carbon neutrality

In order to keep global warming as close as possible to a limit of 1.5°C, governments, regulators and businesses are reaffirming their commitment to carbon neutrality. In parallel, the regulatory framework is being strengthened and investment policies seeking to reduce the impact of buildings on the environment are multiplying. In particular, these initiatives include solutions with good energy efficiency to facilitate the reduction of energy consumption in all buildings.

### Europe on the challenge of buildings' energy performance

In order to meet its climate objectives, the European Union needs to reduce greenhouse gas emissions from buildings by 60%, their final energy by 14% and energy consumption for heating and cooling by 18% by 2030, in relation to 2015 levels.

### The digital revolution in service to energy performance

In addition to revolutionising lifestyles, the digitalisation of the economy and digital convergence also pave the way for intelligent solutions in buildings, with infrastructures that are capable of talking to each other and managing the exchange of increasing volumes of data. Connected, these infrastructures can help to reduce energy bills. Once a thermostat is connected, it is then able to adjust the temperature according to lifestyles or the weather forecast. A connected electrical cabinet allows you to track consumption item by item and to prioritise it. It can also facilitate the avoidance of needless over-consumption by automatically managing loads according to the energy production capacities. Connected PDUs and UPS significantly improve the energy efficiency of data centres by facilitating monitoring of the energy supplied to cabinets and tracking the power, load and condition of batteries in real time.

### The electrical sector, a central role



**ALBAN JAUFFRET**  
Director of Marketing Europe

*"The electrical sector has a central role to play in improving the energy performance of buildings. First and foremost by developing solutions which allow for the consumption of less electricity, but also by making users and installers players in the sustainable economy through raising awareness and providing training."*





# For a low-carbon society

## Legrand more committed than ever

In order to limit its impact on climate change, Legrand is committed to reducing the carbon footprint for its activities and its products. The Group also works to help its clients (and buildings) to improve their energy efficiency.

### COMMITMENT TO "NET ZERO" BY HORIZON 2050

ENDORSED BY THE SBTI (SCIENCE BASED TARGETS INITIATIVE).

**32%** OF THE METAL USED BY LEGRAND IN 2023 WAS RECYCLED MATERIAL.

**BETWEEN 2021 AND 2023;** LEGRAND'S ENERGY EFFICIENCY OFFERINGS ALLOWED THE GROUP'S CLIENTS TO PREVENT A LARGE VOLUME OF CO<sub>2</sub> EMISSIONS.

### Reducing the Group's carbon footprint

The Group's top priority is to reduce the energy consumption of sites, in particular by investing in less energy-intensive technologies or by implementing energy-saving measures. The reduction in CO<sub>2</sub> emissions is also achieved through purchasing of "green" energy and installation of renewable energy sources at the Group's sites.



LEGRAND IN ACTION

#### Space for renewable energy

Committed to a huge programme for decarbonation of the energy consumed, Legrand is installing photovoltaic panels on the roofs of its major sites around the world. To date, 25% of the Group's industrial sites are thus equipped. These panels allowed the Group to generate 7 GWh of renewable energy in 2023.

### Limiting the environmental impact of our products

Legrand is also concerned with reducing the environmental impact of its products. The Group therefore integrates the principles of the circular economy into the development of its products. This means taking the entirety of the life cycle of the product into consideration, right from the design stage, in order to limit the impact. This consists of reusing, repairing, refurbishing and recycling products and materials for as long as possible. This ecodesign approach results in limitation of the volume of materials used or energy consumed, designing products using the maximum possible recycled materials and generating less waste. It also leads to Legrand testing new commercial approaches, in particular trade-in and resale of reconditioned products.

LEGRAND IN ACTION



#### SEANO™: an ecodesigned offering from start to finish

The devices in the SEANO™ offering are predominantly made from recycled plastic (78% for the switches and 63% for the sockets); no thermosetting; steel of a quality that permits the avoidance of the energy-intensive galvanisation process; wood from PEFC-certified forests...: launched at the start of 2024, the new range of SEANO™ equipment takes advantage of the latest innovations in ecodesign. Direct benefit: the impact of SEANO™ on the environment is reduced.

### Proposing low-carbon solutions for our clients

Faced with the climate emergency and the emergence of new requirements, Legrand is also developing a large range of solutions intended for controlling energy consumption in all types of building. These solutions allow a home's energy consumption to be measured, reduced, managed and optimised in order to, ultimately, reduce the connected home's impact on the environment. They also facilitate optimisation of energy consumption in service buildings or data centres, with energy consumption savings of up to 35%.

LEGRAND IN ACTION



#### Improving energy efficiency in data centres

The use of intelligent PDUs (Power Distribution Units) and prefabricated electrical busbars facilitates the optimisation of energy efficiency in data centres. These innovative systems are effectively able to precisely measure the energy distributed to each bay and to monitor their power supply in real time. In parallel, the Legrand connected UPS (Uninterruptible Power Supplies) play a crucial role in efficient load management and monitoring of battery condition, thus ensuring superior performance and reliability in the data centre's power supply systems.

# Light+Building

## The Legrand booth

The Legrand booth presents the Group's latest innovations for improving energy efficiency in residential buildings, service buildings and data centres in an area measuring 420 m<sup>2</sup>. The solutions on display all have one thing in common: they improve life by improving the energy efficiency of the building.



### FOR THE RESIDENTIAL MARKET

You will find Legrand energy management systems (HEMS), the CX<sup>3</sup> with Netatmo connected electrical cabinet, the Green'Up HOME terminal and the new SEANO™ range of equipment, as well as its SEANO™ with Netatmo wireless variant and SEANO™ MyHOME BUS wire variant, at the Legrand booth.



### FOR THE SERVICE MARKET

Discover the latest building management and control solution as well as new developments in lighting management, particularly in lighting sensors, here. You can test the new charging stations for electric vehicle fleets. You can see how Nemo easyconnect makes it easy to add measuring points to existing installations without causing an outage. You can also discover the new range of Conto energy meters. You can experience solutions tailored to the hotel industry, in particular offerings for management of hotel rooms with the UX One connected thermostat.



### FOR DATA CENTRES

You can see in situ how the latest innovations from Legrand guarantee service continuity (Keor Mod UPS) as well as the right power supply and equipment monitoring (Raritan PDU).



WE GIVE A SECOND LIFE TO OUR BOOTH

In the interests of the environment, the panels and installations created for the trade fair have been designed such that Legrand can reuse them over the course of the year.





# Solutions for improving energy efficiency in the residential sector

## A Legrand solution for every requirement

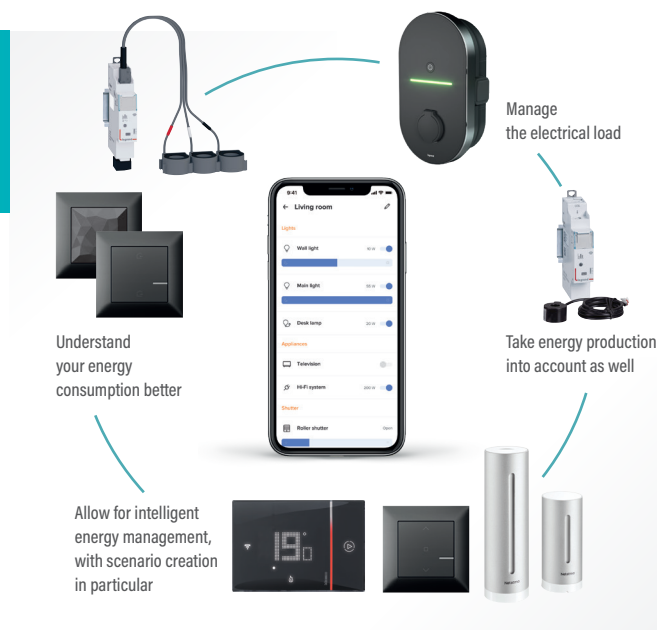
Choosing Legrand energy efficiency solutions for your home guarantees that you will find a solution for every need, and benefit from innovative products that improve life by making your home more comfortable, safer and more economic – wherever you are in the world.





# Taking action on your consumption every day with energy management systems

Thanks to Legrand energy management systems, you can benefit from solutions that allow you to monitor and control your energy consumption at any time.



## ONE STEP FURTHER WITH HOME + CONTROL



Home + Control continues to expand and allows for energy efficiency improvements in the home through monitoring of connected electrical devices, control of the installation or even monitoring and visualisation of electricity consumption. The application includes:

- The Group's latest energy efficiency solutions, in particular the Smarter™ with Netatmo connected thermostat, the Netatmo intelligent thermostatic heads and the Netatmo intelligent thermostat;
- New compatibilities with partner products: Bubendorff roller shutters, Velux roof windows, Aldes ventilation;
- Features such as planning allow automations in your home to be triggered at a pre-defined time.



## USE CASE: COMFORT AND ENERGY SAVINGS AT HOME

You leave for work. You activate absence mode. Thanks to the Smarter with Netatmo connected thermostat, the temperature in your home is programmed according to a personalised heating schedule. In the event of a prolonged absence, you can even adjust the heating instructions and put the heating into frost protection mode in order to limit your energy consumption with Home + Control.



## Monitor/understand

Easy to install and use, Legrand energy management systems facilitate a better understanding of energy consumption, enabling you to take appropriate action as a result.



## Distribute/offload

The smart Legrand solutions are able to manage energy distribution for better allocation, avoiding the risk of outages and over-consumption without restricting the use of devices.



## Create scenarios

With Legrand energy management systems, scenarios can be created in order to use energy intelligently or create scenes of life according to each person's patterns. Your presence is simulated while you are away. You are alerted in the event of an outage. The roller shutters close in the event of high temperatures in order to keep things cool...



## Monitor energy production

With the home energy management system, it is possible to manage the use of your electrical devices according to their energy production.



# Experience energy efficiency at home with Legrand connected solutions

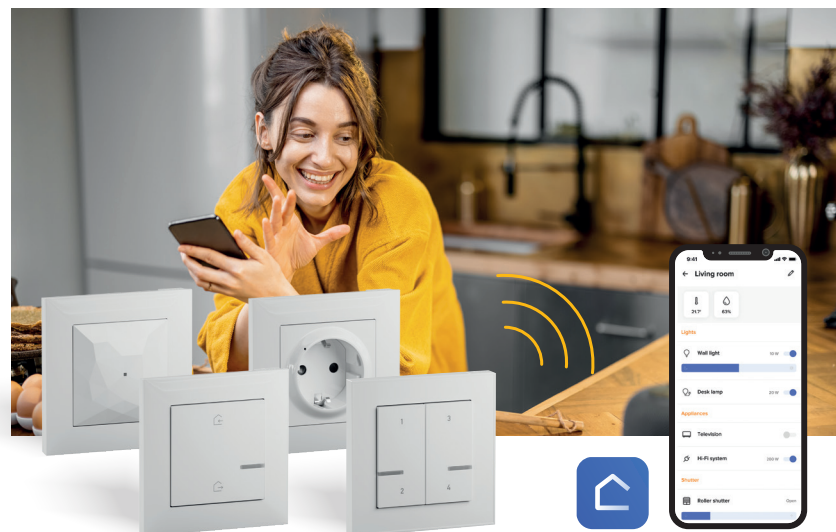
You can monitor your consumption thanks to Legrand solutions. You have better heating and cooling management. Plus you can charge your electric vehicle efficiently.

## Monitor their consumption

### A handy connected installation with SEANO™ with Netatmo

Among the solutions to be presented at the Legrand booth, a new connected “with Netatmo” range of equipment will be showcased: SEANO™ with Netatmo. Exhibited for the first time at Light+Building, this range, with its extremely innovative design, integrates the latest features developed by Legrand. Compatible with the Home + Control app, it makes turning a traditional electrical installation into a connected installation child's play.

Tailored to each person's needs, it is equally suitable for new homes and existing installations. It is also available in a BUS wire variant, SEANO™ MyHOME.



### USE CASE: PUTTING AN END TO CONSUMPTION IN SLEEP MODE

You leave for the weekend. With “Home + Control”, you can check the electricity consumption on your SEANO™ electric sockets and control them remotely. You can directly shut off the flow of current remotely, thus preventing unused devices at home from remaining in sleep mode in your absence.

### Control your day-to-day energy consumption with CX³ with Netatmo

The first Legrand connected electrical cabinet, CX³ with Netatmo is at the heart of a building's electrical infrastructure. It allows the user to take control of their home, from lighting to the hot water tank to charging sockets for electric vehicles. With CX³ with Netatmo, the user can thus control their energy consumption as a whole and by item, and reduce their bills thanks to the predictive energy management functions.



# Experience energy efficiency at home with Legrand connected solutions

You can monitor your consumption thanks to Legrand solutions. You have better heating and cooling management. Plus you can charge your electric vehicle efficiently.

## + AND ALSO... BENEFIT FROM SOLAR ENERGY

What could be better for improving the energy performance of your home than producing your own renewable energy by installing photovoltaic panels on the roof of your home? At the heart of a building's ecosystem, Legrand supports installers by offering solar panel protection and wiring solutions, as well as connected eco meters and safety contactors which protect the installations while optimising their energy performance.

## For better heating and cooling management

An essential part of the connected home, the Netatmo intelligent thermostat, combined with Netatmo thermostatic heads, allows you to benefit from pleasant warmth and perfect comfort in your home, room by room. Discover the Smarter Air Controller with Netatmo or Netatmo Smart AC Controller that allow you to control an air conditioner locally, remotely using the Home + Control app or by voice using a voice assistant. You can thus control the desired temperature or the fan speed remotely. You can also use the notifications sent by the Netatmo Smart Weather Station to optimise the heating and cooling of your home according to the weather.



### USE CASE IMPROVING THERMAL INSULATION

You are in the office. Snowy weather is forecast. You have connected your SEANO™ with Netatmo installation to the Netatmo intelligent weather station and your roller shutters. As soon as the outside temperature drops, the roller shutters close automatically in order to improve the thermal insulation. You therefore benefit from free energy!

## Charge your electric vehicle

Designed for use at home as well as in company and public car parks, Green'Up charging stations and sockets facilitate optimised electric vehicle charging. Charging during off-peak hours, energy consumption measurement, load shedding where necessary, remote control, programming, scenarios...: the Legrand charging station has innovative, easy-to-use features which help to protect the environment.



### USE CASE LOAD SHEDDING WHERE NECESSARY

It's 7 p.m. You get home and plug in your electric vehicle to charge. It's time for the kids' bath and dinner. It is also the time when there's an energy peak. Charging automatically stops, and then resumes during the night.





# Solutions for improving energy efficiency in the service sector

## Be more energy efficient

Choosing Legrand energy efficient solutions  
is also choosing better energy consumption.



# Commit to an energy efficient approach for service buildings with Legrand solutions

Legrand supports you in the implementation of an E<sup>2</sup> approach and in meeting the regulatory requirements in new builds and renovations. Reducing the energy consumption of a building while optimising the functioning of the technical equipment requires you to proceed in stages:

- Stage 1: auditing the building in order to identify areas of energy loss
- Stage 2: acting on the building by proposing solutions for better energy control

## + REDUCE YOUR ELECTRICITY CONSUMPTION BY MORE THAN 50% WITH AIRZONE

Airzone has been a leader in the field of HVAC control systems for 27 years, guaranteeing efficient cooling and heating thanks to state-of-the-art technology. Committed to creating a superior air conditioning experience which maximises comfort and minimises energy consumption, Airzone works on custom solutions for the majority of systems on the market, including inverter air conditioning units, VRF systems, air/water heat pumps, coolers, convection heaters, underfloor heating and cooling, and radiators. Airzone is compatible with more than 100 HVAC brands and 18,000 models of HVAC unit.

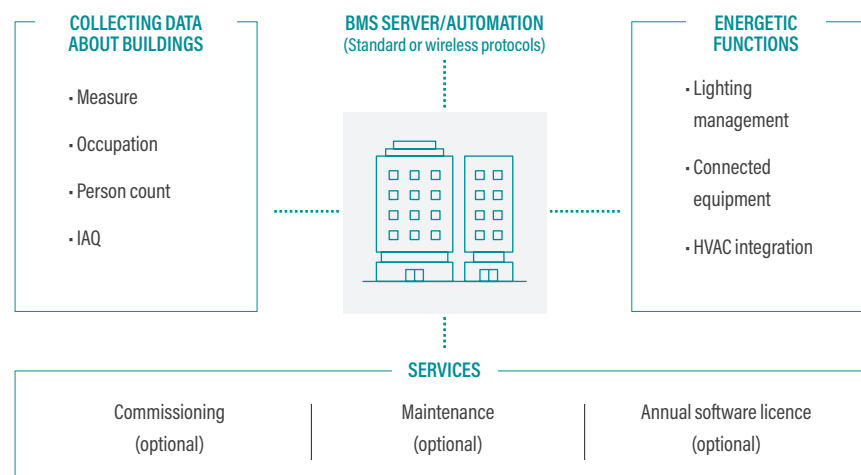
## Improving building management

Primarily intended for installers and building managers, the GTB Legrand (Gestion Technique du Bâtiment, technical building management) offering aims to improve monitoring, maintenance and inspection of service buildings. Effectively, it allows you to retrieve information originating from various equipment in the building: lighting management, door contacts, equipment control and energy measurement at the cabinet.

It also facilitates control of the heating, ventilation and air conditioning positions via solutions from specialist third parties like Airzone.

The Legrand solution includes a configurable control panel for a personalised user experience. Ultimately, the challenge is to make the building stakeholders completely independent. They can thus make informed decisions in order to improve the energy performance of their building.

The GTB Legrand offering is a progressive solution for both new and renovated buildings. It is possible to manage one or more sites from the same interface. Someone managing various service buildings can therefore automatically apply energy efficiency rules across their entire portfolio.



## LESS THAN 10%

OF EUROPEAN SERVICE BUILDINGS ARE EQUIPPED WITH AN ENERGY MANAGEMENT SYSTEM.



**USE CASE:  
ALERTING**

While gathering information from contactors installed on the frames, the Legrand building management and control system detects that a window in a room in the building has been left open. It triggers an alert so that someone can go to the location to close the window, thus preventing the loss of heat and risk of an intrusion.



**USE CASE:  
ADJUSTING THE  
TEMPERATURE**

It's Friday. It is 11 a.m. The presence sensor counts the number of people present in the open space. It detects that there are only a few colleagues in the office (many are working from home). Connected to these presence sensors, the GTB Legrand system will then adjust the room temperature in relation to what would have been expected if everyone was there.



## Commit to an energy efficient approach for service buildings with Legrand solutions

### Managing lighting

Lighting accounts for 19% of global electricity consumption and around 6% of greenhouse gas emissions. In order to reduce energy consumption in buildings, the thermal regulations require lighting to be controlled and optimised. Legrand offers numerous solutions from presence sensors and motion detectors through to intelligent lighting control systems in order to achieve this.

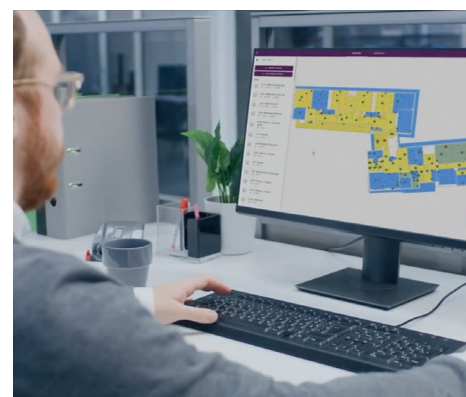
#### Intelligent sensors to prevent over-consumption

Legrand presents two new intelligent sensor offerings for the service market, always with the aim of optimising energy savings and guaranteeing comfort.

Firstly, there is the Light Up offering, which meets a building's needs for lighting management, normally without changing the wiring but with a reduced installation time thanks to configuration using the Close Up application or even the possibility of deviating with a wireless, battery-free control. Light Up presence sensors are compatible with ON/OFF and DALI 2 luminaires.



Secondly, we have the Polaris offering, a DALI2 system solution which is perfect for large service buildings. With its simple and intuitive software, its wired or wireless controls and sensors, it allows facility managers to easily adjust the lighting management to meet the requirements for flexibility in large service buildings.



#### Emergency lighting: X-LIGHT, much more than a simple emergency lighting device

The new X-Light emergency lighting blocks are much more than a simple emergency lighting device. They are efficient and durable connected systems that combine safety and energy efficiency. With a minimalist and understated design, also available in a black version, they fit seamlessly into business and commercial offices.



## Commit to an energy efficient approach for service buildings with Legrand solutions

### Managing a fleet of electric vehicles

Legrand electric vehicle charging stations allow you to set up and manage the operation of a fleet of vehicles. They allow charging to be controlled remotely via a service platform capable of indicating the available power by building and by station, and dividing the power between the various stations according to requirements ("smart charging"). They also facilitate access control and management of billing for charges.



#### A complete solution for our clients with Partino

Legrand's partner in the electric vehicle charging station sector, Partino allows the Group to offer a complete solution, including in particular assistance with charging station installation and compatibility tests. Partino also provides the possibility of remote support: in the event that a charging station breaks down, this is identified in the system and diagnostics are possible. It is therefore possible to intervene remotely or to come and eliminate the fault.

### Improving energy efficiency in hotels

Choosing Legrand guarantees that you will find integrated solutions that also take hotel life into consideration, whether for business trips or tourist stays. These solutions are intended for both hotel chains and independent hotels, for building managers and end users. They include standard functions such as control of electrical equipment as well as more complex functions which allow them to manage third-party services available to clients. Legrand also offers connected solutions which allow operators, owners and hoteliers to retain their ever more demanding customers and to guarantee the best possible connected check-in and check-out experience, all while rising to the challenges of energy efficiency in a service building.



#### Achieve energy savings with the UX One offering

UX One is a connected thermostat. Linked to connected equipment, it becomes a control system for the connected room and offers a complete ecosystem for hotel room management. Combining design and technology, this control solution allows the user to easily control the temperature and lights in the room, as well as the roller shutters and badge lock, and to customise scenarios. Thanks to its intelligent presence sensors, UX One is even able to detect when no-one is in the room and thus switch the heating to eco mode, allowing for energy savings as a result.



#### USE CASE: ADJUSTING LIGHTING AND TEMPERATURE

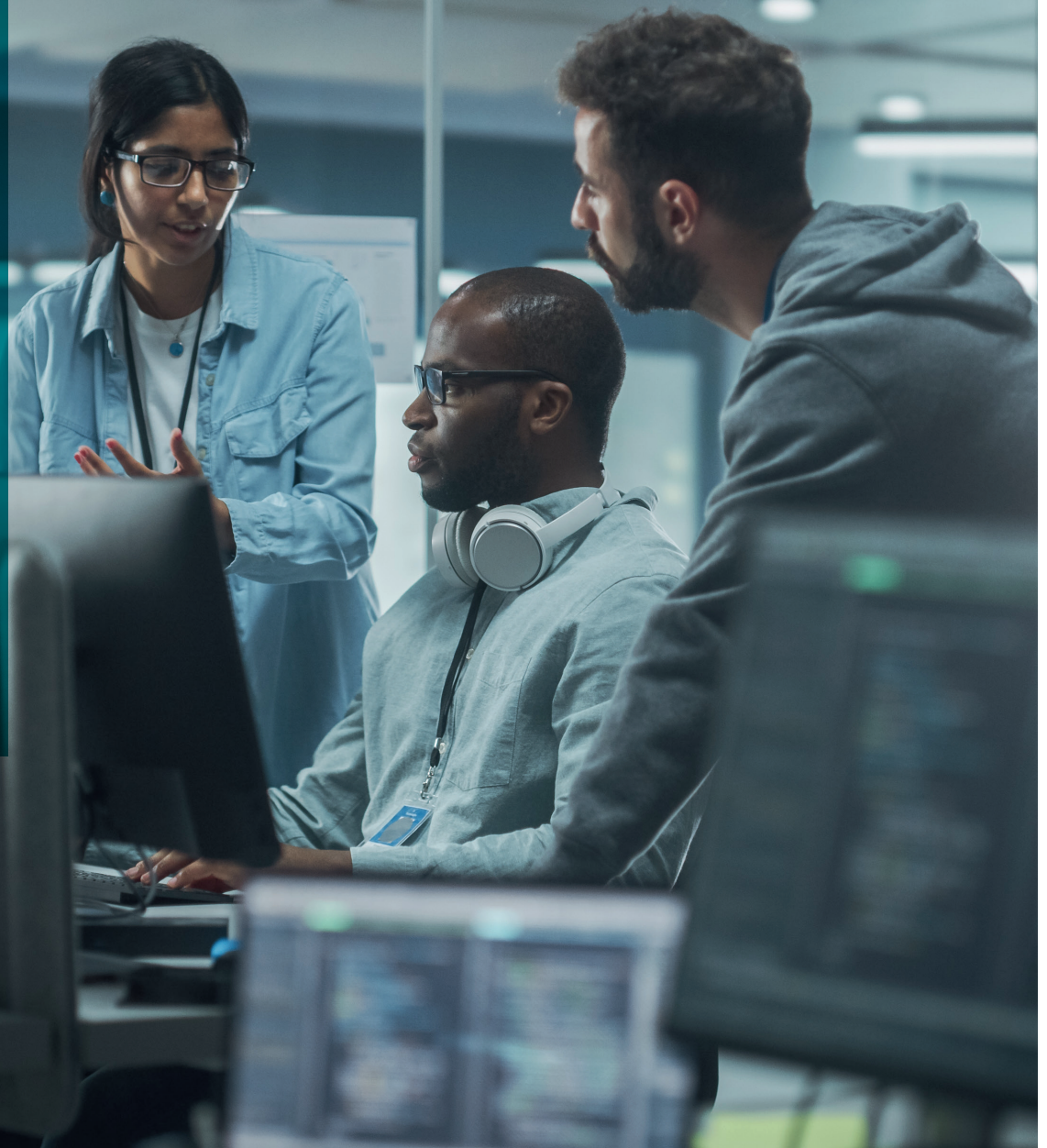
You arrive at the hotel. The welcome scenario triggers and creates a welcoming atmosphere with appropriate temperature and lighting. When you check out, the team are automatically informed about your departure and can therefore prepare the room for the next guest.





# Solutions for improving energy efficiency in data centres

Choosing Legrand solutions means choosing service continuity and guaranteeing the right power supply and equipment monitoring in data centres.



# Improve energy efficiency in data centres with Legrand solutions

In the era of digitalisation and evolution of lifestyles, data centres appear to be the cornerstones of this transformation. Going beyond a simple response to the energy and climate challenges, Legrand data centres emerge as catalysts for new possibilities, anticipating future needs. Legrand reaffirms its priorities and the Group's ambitions in this sector: contributing to guaranteeing continuity and service quality.

## + NX1: NEW PACKAGING TO REDUCE UPSTREAM ENERGY CONSUMPTION

Designed in 2023, the new "bulk" packaging for the NX1 PDUs allows raw material usage and transported volumes to be reduced. The energy requirements further up the chain are also reduced.



## Offering service continuity

The Keor Mod UPS are the perfect solution for all IT applications with risk: their structure allows you to meet client requirements with regard to the continuous evolution of IT infrastructure.

Packed with technology, these new inverters offer unique advances in energy efficiency. They allow for automatic control of the cooling fans according to the load and temperature for each power status, thus reducing consumption and the noise emitted by the system.

The Keor Mod offering presented at the booth is rounded out by the latest addition to the family, the Flex Up offering, previewed in London.



## Guaranteeing a good power supply and equipment monitoring

The new Raritan PX4 connected PDUs have sensors which allow for remote data collection. Their analysis provides an extremely precise understanding (+/- 0.5%) of consumption for each server. They allow you to run diagnostics and then make the appropriate decisions to improve energy efficiency. In addition to this monitoring of server consumption, the PX4 PDUs also allow you to monitor data such as temperature in the cabinets, and thus to analyse cooling efficiency.

Finally, the PDU itself is energy efficient thanks to the use of bi-stable relays to open/close the sockets. Where a traditional PDU is constantly consuming energy to maintain the contact status (open/closed), a Raritan PDU only needs a pulse.



### USE CASE: TEMPERATURE DETECTION

The PX4 PDU detects that the temperature in the cabinet is too low. It sends an alert to maintenance, who can intervene to raise the temperature, thus saving energy.

Connected sensors on the new Raritan PX4 PDUs enable remote data collection.





[legrandgroup.com](mailto:legrandgroup.com)



[youtube.com/user/legrand](https://youtube.com/user/legrand)



[linkedin.com/company/legrand](https://linkedin.com/company/legrand)



[twitter.com/Legrand](https://twitter.com/Legrand)

#### **Legrand contact**

Delphine Camilleri

Tel.: +33(0)5 55 06 70 15

[delphine.camilleri@legrand.com](mailto:delphine.camilleri@legrand.com)

#### **HEAD OFFICE**

128, avenue de Lattre de Tassigny

87045 Limoges Cedex, France

Tel: +33(0)5 55 06 87 87

