Press Kit
October 2009

Schneider Electric's Hive: The Hall of Innovation and Energy Showcase

Schneider Electric

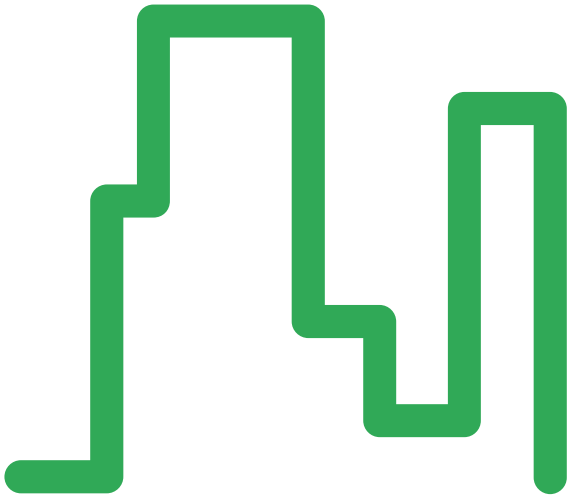
The Hall of Innovation and Energy Showcase: Facts & Figures

80 kWh/sq.m/year

The Hive's current energy consumption—four times less than at Schneider Electric's previous headquarters.

35,000

square meters. The building's floorspace.



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Number of Schneider Electric sites in the Paris region brought together at The Hive.

3,000

Number of chilled beams, for more efficient heat distribution throughout the building.

20,000

Number of customers expected per year at the International Customer Lounge, Schneider Electric's new high-tech showroom.

1,700

Number of Schneider Electric employees at The Hive.

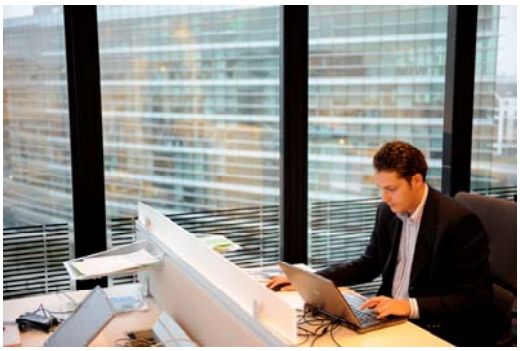
4,510

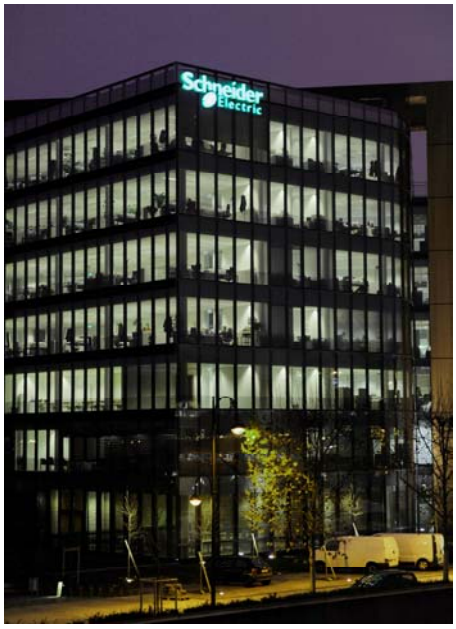
Number of lights in The Hive.

An ideal location

Located in the Rueil 2000 neighborhood of Rueil Malmaison, France, Schneider Electric's headquarters building is ideally situated in a busy business and industrial district. The Hive also features easy access to the RER A suburban train network and the A86 motorway.

The Hall of Innovation and Energy Showcase Pictures





Available on demand.

Cutting-edge technologies from Schneider Electric to serve energy efficiency

Schneider Electric offers a wide range of technical solutions and services for meeting energy efficiency targets based on recognized expertise in all the technical aspects of buildings. Its new headquarters, known by the French acronym HIVE, is a showcase of these technologies in use.

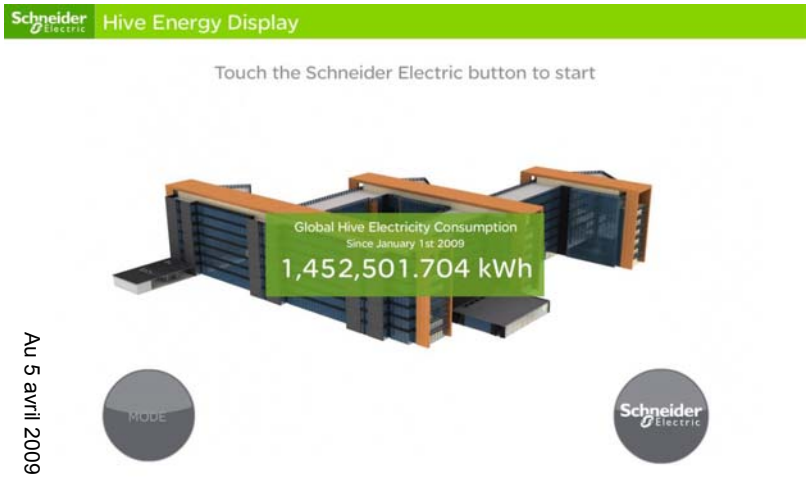
> Building Management Services

Building Management Services (BMS) handle functions related to user comfort. These include:

- Hourly, daily, weekly and seasonal **controls**.
- **Schedule-based** lighting, heating and air conditioning.
- **Shutter and sunblind control**.
- **Pre-programmed** scenarios.

The BMS's architecture is based on open systems to control all uses, including indoor and outdoor lighting, chilled beams, Venetian blinds, access control and intruder alert, video surveillance, and the integration of communication with third-party electricity generation and heating/cooling systems.

> The HIVE Energy Display



To raise awareness about energy efficiency and encourage employees to adopt good practices, the BMS system is backed by an energy consumption tracking software called the Hive Energy Display (HED).

Installed in the International Customer Lounge, the HED shows the building's annual energy consumption, as well as:

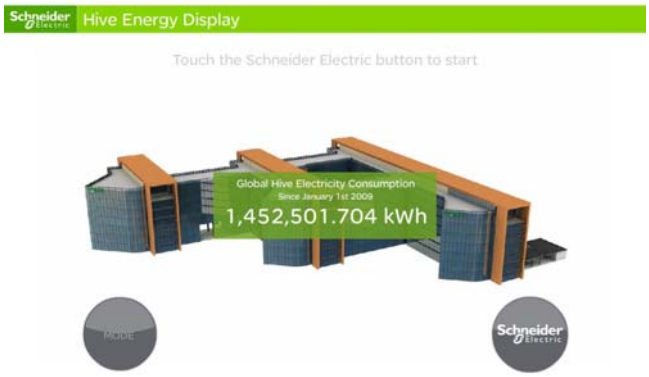
- Energy consumption for different uses (lighting, heating, IT, etc.).
- The breakdown of energy consumption by type of use.
- Daily, monthly and annual energy efficiency.
- Monthly consumption trends by type of use.
- Daily, monthly and annual energy savings.

For each indicator, employees can zoom in on data in specific areas of the building, all the way down to each workstation.

The HIVE Energy Display, to build awareness to energy savings

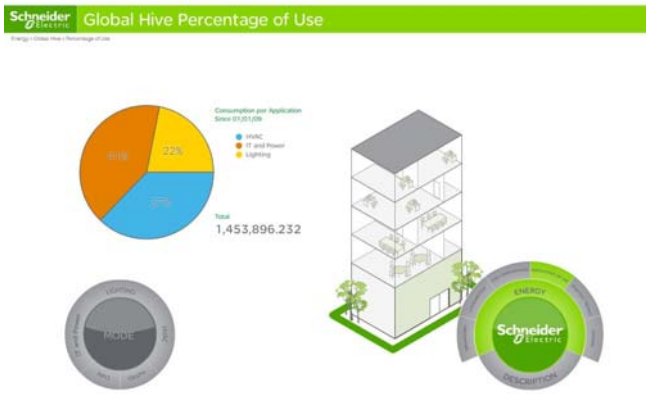
True scoreboard of the energy consumption for Schneider Electric's headquarter, the HIVE Energy Display (HED) is used to educate visitors of the showroom as the inhabitants of the building to energy efficiency solutions of Schneider Electric.

Initiated by the team of the ICL and employees of the Business Buildings of Schneider Electric North America, this energy consumption tracking software has been developed by employees of the Business Buildings of Schneider Electric Australia and France, reflecting the international dimension of the Group ...



The HED homepage summarizes the overall energy consumption of the HIVE since beginning of the year

It allows to track daily energy consumption of the building, hour by hour.



It can distinguish energy consumption by type: lighting, HVAC, IT and process.

The HED compares monthly trends of consumption with targets

A screen summarizes the energy savings and provides a simple comparison with acres of forest saved.

Follow energy consumption for each area of the building, through the HED

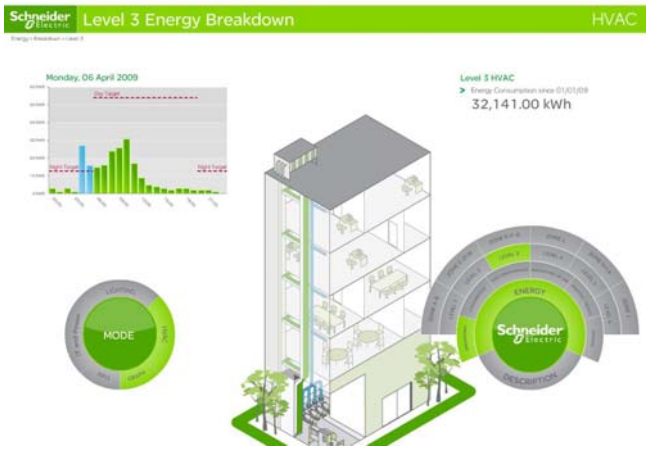
The HED follows the overall energy consumption of the building but also zooms in on a particular area and details of consumption by type (lighting, HVAC, IT and process).

Each employee of Schneider Electric working in the HIVE may well find the energy of his work area. This innovative technique allows an awareness of energy savings, and adapt everyday gestures accordingly.

Focus on an area of the HIVE level 3...

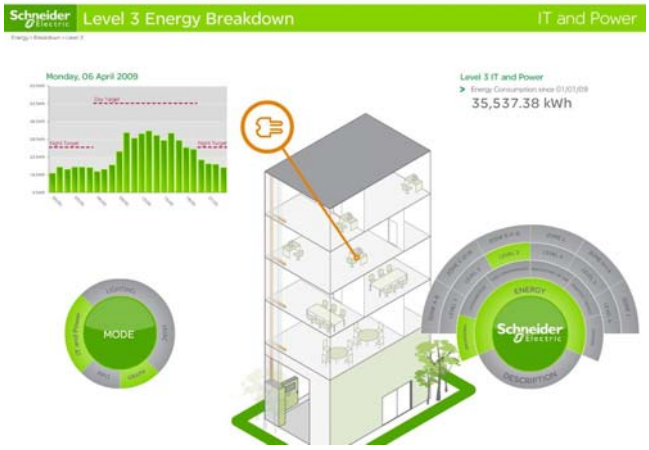
Zoom in on lighting energy consumption of a specific area.

For each type of energy consumption, a description of the facility is proposed.



A graph allows to follow details of consumption by type on long term.

Focus on energy consumption for IT and on an area of level 3.



Focus on energy consumption, with monthly follow-up for IT and process, same area.

Technical solutions from Schneider Electric for greater occupant comfort

> DALI lighting functions: The most efficient integrated solution

DALI is a smart lighting management system that allows for pre-programmed lighting scenarios based on employee presence, amount of sunlight, time of day and other factors. Light sensors installed in each work area and presence sensors give DALI the real-time information it needs to operate effectively.

Although DALI is a stand-alone system, it integrates perfectly with the BMS system and the HED so that each employee can monitor his or her own consumption.

What's more, it offers easy hook-up with an ordinary 5-wire cable. Ease of use also makes for optimized operation and maintenance, as work areas can be reconfigured and new lights added indefinitely.

> A single system for managing individual controls

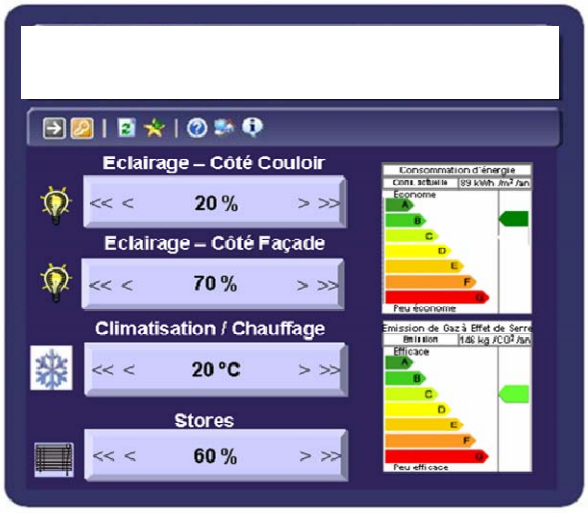
All of the individual controls for lighting, blinds and HVAC are coordinated by a single system that can be accessed via a wall-mounted unit or a remote control.

Pre-programmed scenarios of arrival and departure times, combined with sensors and actuators, allow for automated work area management.

> A tailored, upgradeable IT network

The Hive's 10 Gb IT network is fully redundant. The switches feature two 1 Gb fiber connections to allow for future technological changes.

WiFi wireless high-speed Internet access is available throughout the building and PowerLine Carrier (PLC) interfaces also offer public Internet access in The Hive's main areas.



The IT network converges with the BMS system so that all technical data is easily available. This makes it possible to:

- Consult technical information and settings from any connected computer via a link with the office communications system.
- Check the main energy indicators in the reception area and the International Customer Lounge.

International Customer Lounge
Discovering Schneider Electric's solutions

The International Customer Lounge (ICL), The Hive's showroom, gives more than 20,000 visitors a year an in-depth view of Schneider Electric's energy management solutions.

Prestigious partners

The high-tech ICL showroom, with its innovative design, features the latest techniques in image, sound and automation. Schneider Electric's prestigious partners on this project were:
Philippe Proisy, Architect
Christian Ghion, Designer
Edouard Leduc, General designer and Main Contractor

> The Tube

To start, the visitor is fully immersed in images representing a Schneider Electric customer's world, to show just how the Group meets users' needs and expectations.

Personalized presentations have been prepared for all customers and partners, from OEMs and systems integrators to energy suppliers and distributors.

> The Vision

Next, visitors get a look at some of the exciting technological innovations currently under development at Schneider Electric.

> The Gallery

The tour ends with a walk through The Gallery, a presentation of Schneider Electric's solutions and services for all market segments (Energy & Infrastructure, Industry, Buildings and Residential), as well as cross-business collaborations for services and projects.

International Customer Lounge, a journey to the center of Schneider Electric's innovation

This close-up look at Schneider Electric's innovation presents some of the beyond-the-horizon technical changes that will impact the Group's lineup in the years ahead.

> Showcase innovations include:

Hyperconductivity with Silicon Carbide
When Nobel prize-winning chemist Henri Moissan identified Silicon Carbide in its natural state for the first time in Arizona in 1905, he had no way of knowing that the compound would perhaps revolutionize power electronics and open the door to fantastic energy savings.

Thanks to its unique physical properties, Silicon Carbide (SiC) could be an attractive replacement for silicon in terms of electrical consumption and the amount of material needed to produce a component, especially since it is estimated that 80% of electricity will flow through an electronic device in the years ahead.

Smart Grid and Demand Response
In an increasingly digital world, energy and information technology are naturally converging.

By adapting existing industrial technologies such as detection, storage and advanced communication tools, enhanced interface and decision-support assistance, it will be possible to create a smart grid that can respond precisely to energy demand.

Making buildings energy efficient

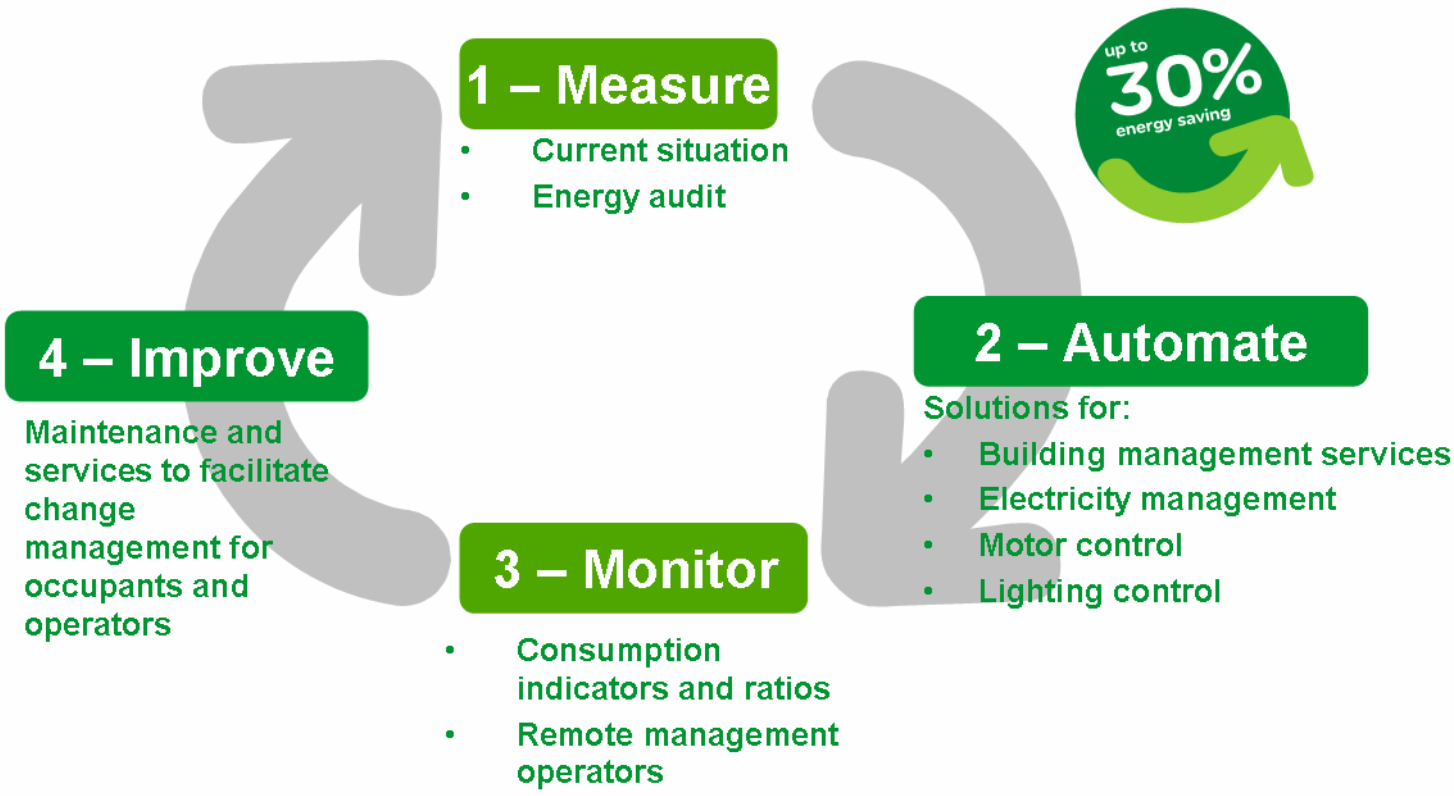
Measure, Automate, Monitor, Improve

The four pillars of Schneider Electric's Energy Performance Contract

As initiatives are launched around the world to reaffirm the critical importance of sustainable development, public officials and the energy industry need to find tangible solutions to make buildings and infrastructure more energy efficient. For Schneider Electric, energy efficiency represents an opportunity to focus its teams on an exciting challenge and to grow and differentiate its business.

Schneider Electric provides its customers with a comprehensive response using sustainable solutions applied in four stages to achieve energy efficiency::

- measure energy use to identify reservoirs of savings and dysfunctions,
- automate, by deploying automation and control systems,
- monitor, to maintain performance by continuously analyzing gains from maintenance, supervision and control,
- improve, by using automation management, consulting, training and tracking resources to raise the bar on performance..



Schneider Electric's energy efficiency solutions can deliver energy savings of up to 30% in buildings, while contributing to the fight against climate change. Because energy is lost as it travels from plant to plug, three kWh have to be generated for each kWh a building uses. Consequently, every kWh saved in a building means three kWh less at the power plant.

About Schneider Electric

As a global specialist in energy management with operations in more than 100 countries, Schneider Electric offers integrated solutions across multiple market segments, including leadership positions in energy and infrastructure, industrial processes, building automation, and data centres/networks, as well as a broad presence in residential applications. Focused on making energy safe, reliable, and efficient, the company's 114,000 employees achieved sales of more than 18.3 billion euros in 2008, through an active commitment to help individuals and organisations make the most of their energy.
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