

Dutch head office for Schneider Electric



CUSTOMER BENEFITS

- Updated, cutting edge technology to visualize and ensure building efficiency
- Document sustainability achievements and reduced energy costs.

PROJECT AT A GLANCE

Office building that houses various Schneider Electric brands. They include:

- Schneider Electric The Netherlands B.V.
- Schneider Electric Energy Netherlands B.V.
- APC Europe B.V.
- APC Holdings B.V.
- American Power Conversion Corporation (A.P.C.) B.V.
- APC International Corporation B.V.
- APC International Holdings B.V.
- Pro-face Europe B.V.

Type of Building:

- 5,671 m2 office building with 350 workspaces

Technologies implemented:

- SmartStruxure™ solution powered by StruxureWare Building Operation
- Power Meters
- Security from Pelco

INSTALLER

Kropman Installatietechniek [Kropman Installation Technique]



Schneider Electric's new Dutch head office is an excellent example of the opportunities available for saving energy in buildings. The building, with its A+ energy label, originally featured a design classified by the BREEAM-NL* certificate as 'Very Good'. The building then received the BREEAM-NL 'Excellent' certificate as a result of the measures adopted once construction had begun. Schneider Electric also received an ISO 50001** - certificate, the standard for energy management.

With the motto 'Practise what you preach', Schneider Electric achieved a reduction in energy consumption in the building by implementing and optimising modern energy-efficient solutions. Schneider Electric's employees, clients and other stakeholders can discover all the technical possibilities and innovations during a guided tour.

Obtaining the correct information is essential for managing a building. But information about energy consumption is spread over several information sources and departments. That's why Schneider Electric deployed its SmartStruxure solution, an integrated building management system that includes software, hardware, engineering, installation and services.

*BREEAM stands for Building Research Establishment Environmental Assessment Method developed and introduced by the Building Research Establishment (BRE), an English research body. The addition of NL makes it clear that this is the Dutch version.

** ISO 50001 offers guidelines for any organisation wishing to deploy, improve or maintain an energy management system.

How can you create an energy-efficient office environment?

1. Determine an objective.
2. Measure, monitor and manage your energy consumption.
3. Use automation and regulating systems to ensure that only the energy required is used.
4. Develop sustainable improvements by using security and maintenance services.
5. Involve the staff in the energy management strategy.
6. Ensure an involved management.
7. Create a project group consisting of various relevant sections and give them authority in the project
8. Communicate about this with employees and stakeholders
9. Evaluate and set new objectives.



The solution removes the barriers that develop with traditional information silos, and delivers building information on all the different systems. Schneider Electric can see real-time data, trends and reports visualised in dashboards. The company can monitor, safeguard, control and manage climate systems, energy consumption, lighting, security and other important building-related systems.

By having a single solution that monitors and controls the energy consumption of all the different systems, Schneider Electric can make better energy saving decisions, and achieve their goal of saving on energy costs.

SmartStruxure solution is using the latest communication standards and web-technology to optimise data and information flow and to prepare clear reports. It was also an important route towards obtaining sustainability certificates and reaching a higher energy performance class in accordance with EN15232.

The building features plenty of natural daylight. This means a reduced need for artificial lighting. LED lighting is used in the corridors and the restaurant. The entire office space is connected to occupancy sensors to reduce lighting costs.

Energy and water meters throughout the building measure the precise energy and water consumption continuously. This insight enables the facility manager to intervene directly if necessary.

An energy-efficient climate system, helped by an air conditioning unit, provides warmth and coolness where needed. The air conditioning unit's ventilators have a modified shaft power output which uses less kinetic energy. These ventilators are also driven by Altivar 212 frequency

regulators. The building is largely (>80 per cent) heated with residual heat (from the Bio-WKK) from the adjacent TNT Green Office building.

There are numerous occupancy sensors that control both lighting and climate. There is one sensor with multiple functions instead of each application having its own sensor. Both systems go into sleep or comfort mode on the basis of this sensor. No-one can ever again forget to switch one or both off when leaving the room.

All circuit breakers and the power meter are connected to the energy management network, which transfers information to Smartstruxure solution, which acts as that single point of information for facility managers. They can easily access information and manage the building via an on-site workstation, a standard web browser or a mobile app. This ensure the right information gets to the right person at the right time.

In-row cooling with an isolated hot/cold street is used in the server room. The server room also has an energy-efficient UPS, SymetraPX. The server room is monitored through StruxureWare Data Center Operation.

The building's security is controlled through Pelco systems by Schneider Electric. The building is properly secured with HD video, cameras and a self-developed security system. It is immediately clear where a report has originated because burglary and fire reports are shown visually. Only employees with authorised passes have access.

With an eye towards the future, the building is smart-grid ready and also boasts five charging stations for electric vehicles, including one quick-charge station where a vehicle can be fully charged within 30 minutes. There are also solar panels for generating sustainable energy.