COMMSCSPE[®]

Eneco turns to CommScope to support a sustainable new world headquarters with 10G cabling



Customer

Eneco

Country

Holland

Challenges

The new head office needed an A+ energy label that was 100 percent carbon neutral.

CommScope solution

The transition to CommScope 10 Gigabit Ethernet LazrSPEED* and TeraSPEED* solutions not only produced a tenfold increase in data-transfer speed, it also added greater flexibility and sustainability.

"Eneco aims for a long-term future without excessive renovation. We don't want to replace the cabling for at least 15 years. Even though 1G is used now, the moment the need arises, 10G is available."

> – Guido Zwiebel-Klaeijsen, Information Consultant, Eneco



Built for sustainability—Eneco not only supplies energy to 2.1 million businesses and households, it also produces and trades energy. Since energy is becoming increasingly more sustainable, Eneco continues to make big investments in wind, water, biofuel and solar energy—investments in a very dynamic market. After several mergers, Eneco was suddenly dealing with multiple locations. It became obvious that a centralization process was necessary, so a select few key locations were consolidated into the company's new corporate headquarters.

Green inside and out

The project began in 2007 and officially broke ground in 2010. Before construction began, Eneco made it clear that the new building must operationally echo the company's mission: "sustainable energy for everyone." Today, more than 2,000 people conduct their daily business in Eneco's new headquarters—a building loaded with sustainable, flexible, innovative solutions.

The new head office needed an A+ energy label that was 100 percent carbon neutral. The building's exterior is characterised by luscious green plants and a beautiful photovoltaic façade that ensures natural insulation. The roof features a garden with reflective solar panels that generate daily energy. Inside, the carpet and furniture are fully recyclable. The energy-efficient lighting utilizes high-efficiency TL lamps and LED components to withstand higher temperatures and for superior cooling.

Guido Zwiebel-Klaeijsen, information consultant at Eneco, explained, "To use our new office space optimally, we built 'flexplaces' that allow 2,200 employees to work from only 1,500 desks, so almost no one uses the same desk every day. As a result, our data cabling also needed to be flexible, so we decided to purchase 10G copper cabling for its 100-metre range. But who would be the best provider?"



Eneco World occupies 28,000 square metres, features 18 floors, two MERs, 24 SERs, approximately 50 patch cabinets, 4400 patch ports and 220 kilometres of cabling.

"To use our new office space optimally, we built 'flexplaces', allowing 2,200 employees to work from only 1,500 desks. As a result, our data cabling also needed to be flexible, so we decided to purchase 10G copper cabling for its 100-metre range."

> — Guido Zwiebel-Klaeijsen, Information Consultant, Eneco

The perfect complement—CommScope's Category 6A UTP cabling

The answer was CommScope. The company's Cat 6A unshielded twisted pair (UTP) cabling was a perfect complement to Eneco's vision for a sustainable Eneco World. The headquarters occupies 28,000 square metres and features 18 floors, two secondary equipment rooms, 24 main equipment rooms, approximately 50 patch cabinets, 4400 patch ports and 220 kilometres of cabling.

Guido explained, "Eneco aims for a long-term future without excessive renovation. We don't want to replace the cabling for at least 15 years. Even though 1G is used now, the moment the need arises, 10G is available. Video conferencing and the Heat and Wind departments place high demands on the network, but CommScope 10G solutions are up to the task."

CommScope's UTP copper cabling provided one standard for everything: security, lockers, video conferencing and Voice over Internet Protocol (VoIP) are transported over the same cabling. Eneco's Energy Trade department is the exception. Guido said, "Time is of the essence here, just like in stock trading. Because this department demands extra-high network availability, the cabling is heavily redundant, so each desk has six connections."

The network backbone is a combination of LazrSPEED 300 multimode fibre-optic cabling and TeraSPEED singlemode fibre-optic cabling. These solutions exceed the OM3 standard and provide 10 Gb/s over 300 metres and even 40 or 100 Gb/s transmission speeds over distances up to 100 metres. The 100+Gb/s singlemode fibre-optic solution provides additional bandwidth in the E-band. To enable analog ADSL, a copper backbone was also installed from the main equipment room to every secondary equipment room.

PartnerPRO[®] Network provider Terberg offers practical solutions to unforeseen problems

PartnerPRO[®] Eneco reached out to one of CommScope's PartnerPRO[®] Network providers, Terberg Totaal Installaties, for the electrical installation. Terberg has extensive experience in the field of sustainability. The CommScope partner previously completed electrical installations in two of the most sustainable buildings in the Netherlands: the Bussum Water Tower and Villa Flora.

Guido explained, "Terberg not only offered a reasonable price, they also offered the most complete solution. They proactively proposed solutions to problems we had not foreseen. And since they are part of CommScope's PartnerPRO Network, they could offer the company's 20-year warranty. That gave us a lot of confidence."

The installation process was also sustainable. The GreenKey mandate meant there was no room for waste in any way. Cabinets were preassembled and delivered without packaging. In just a few months, the office had to be transformed from an empty shell to a bustling office. As a result, six suppliers were often working simultaneously on the same floor. For this reason, Eneco used Anixter's Last Mile delivery service to ship CommScope cables accurate to the very metre, saving valuable time with significantly less packaging.

Increased productivity and cost-efficiency

Guido remarked, "This new building gave us the opportunity to start over again. Every employee received a new laptop because it consumes less energy than a desktop PC. By opting for one standard, the Information Communication Technology work has also become much simpler with much less patching. This increases productivity and efficiency across our IT department." The company is very cost-conscious. Guido explained, "We drew up a precise business case for this centralization initiative. What we spent in the building, we saved by closing other locations." Through digitalisation, Eneco now prints 30 percent less paper since their relocation. They have also managed to reduce cupboard space by 80 percent. In the future, the company plans to move more departments to its headquarters, saving even more.

"Even the Board of Directors is present here," Guido said. "They are very close to our workforce and daily operations. Meetings can take place without the time and expense of travel. Everything is here and everything works great! We have CommScope to thank for our brand-new, efficient, sustainable, economical solution."

Everyone communicates. It's the essence of the human experience. *How* we communicate is evolving. Technology is reshaping the way we live, learn and thrive. The epicenter of this transformation is the network—our passion. Our experts are rethinking the purpose, role and usage of networks to help our customers increase bandwidth, expand capacity, enhance efficiency, speed deployment and simplify migration. From remote cell sites to massive sports arenas, from busy airports to state-of-the-art data centers—we provide the essential expertise and vital infrastructure your business needs to succeed. The world's most advanced networks rely on CommScope connectivity.



commscope.com

Visit our website or contact your local CommScope representative for more information.

© 2016 CommScope, Inc. All rights reserved.

All trademarks identified by ® or [™] are registered trademarks or trademarks, respectively, of CommScope, Inc. This document is for planning purposes only and is not intended to modify or supplement any specifications or warranties relating to CommScope products or services.