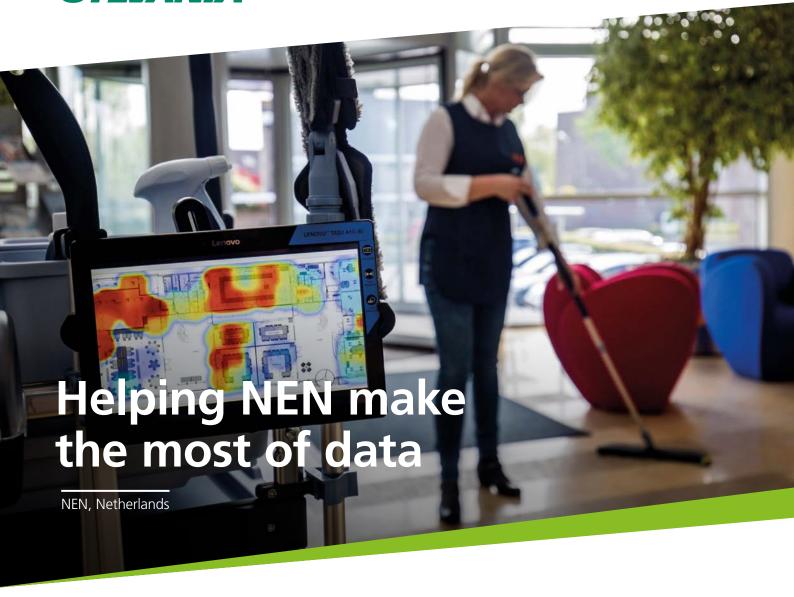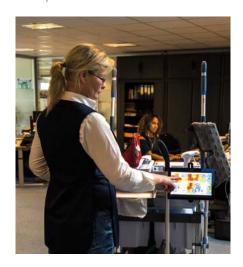**SYLVANIA**

Helping NEN make the most of data

NEN, Netherlands

NEN, the Netherlands Standardisation Institute – a developer and promoter of international and European standards – is aiming to make its premises as sustainable as possible and that includes operating its facilities in the most efficient and effective way.

Thanks to its recent implementation of SylSmart Beyond, a new IOT (Internet of Things) enabled lighting control system from Sylvania, the company is well on the way to achieving its aim.

It is a revolutionary fully internet connected solution that analyses data collected by luminaires, installed throughout a building or at multiple sites, and makes it available globally and in real-time through a cloud based portal.

Key Facts

Client: NEN

Partners: My Sustainable Business and Relighting

Key Outcomes

- De-centralised intelligent lighting control system installed which is able to acquire data, enabling operational insights and savings beyond lighting

- Up to 75% energy is being saved compared to a standard on / off system

- Cleaning operations have been significantly improved and costs reduced

- 5% cleaning cost saving a month

feilosylvania.com

Home to 280 staff, the NEN headquarters had long had a lighting system that was unpopular with employees. Edwin Van der Zijden, the Facilities Manager at NEN, started looking into and researching options for a new system. Mr Van der Zijden was initially focused on simply replacing the existing luminaires with LED fixtures but following conversations with Sylvania he became impressed with the additional capabilities the SylSmart Beyond solution could provide. Mainly the prospect of having a de-centralised intelligent lighting control system with sensors integrated into each luminaire and the prospect of being able to acquire data through the lighting system, enabling operational insights and savings beyond lighting as Mr Van der Zijden, comments:

"The data the SylSmart Beyond solution enables us to collect is so valuable to the operation of our business. It is not just about energy efficiency, although that is an important factor, it is about changing our working practices to be truly efficient and smart."

SylSmart Beyond was created when over 1000 SylSmart enabled luminaires at NEN were connected to the SylSmart Intelligence platform, a data collection function that captures space utilisation data through the lighting control system and helps analyse use trends in the building allowing for the optimisation of building performance and operation of lighting but also beyond lighting efficiency including occupancy analytics. Mr Van der Zijden is very excited about SylSmart Beyond and the possibilities it has opened up.

SylSmart Beyond's ability to capture space utilisation data of the building enables both historical and real time data insights of how the building is used by its occupants. It is able to capture this data in high resolution owed to the sensor density made available by the lighting system. With each luminaire containing sensors, a fine grain of information is made available to accurately map the use of each space in a building. Using this data we are able to determine areas of more or less use during different periods.

This data can then be used to formulate cost saving strategies such as reducing security costs, re-deploying use of space from meetings rooms to work spaces, addressing other energy using systems such as HVAC, reducing food waste in on-premise canteens and reducing cleaning costs by not cleaning unused areas. This is the future of lighting.

NEN has adopted SylSmart Beyond and is already witnessing the power of harnessing this data through the lighting system. The association has used the occupancy analytics data to change the way its cleaning contractors maintain the building's cleanliness. This enables the cleaning company to see which areas have been used and clean according to use rather than cleaning unused areas. This has led to operational changes in the contractual relationship between NEN and its cleaning contractors and has provided a reduction of around 5% a month on its cleaning costs all owed to the data captured by the SylSmart Beyond.

"When we looked into the options for installing LED lighting with motion sensors, I immediately made the connection with cleaning," continues Mr Van der Zijden. "Cleaners now have a tablet on their work trolley so they can see if a room has been visited or not and if it needs to be cleaned. This allows us to save time in regular cleaning and I use the extra time for specialized cleaning tasks, such as floor maintenance. The cleaners have reacted positively to the changes and they may even be the first cleaners in the world to have a tablet on their work trolley."

In conclusion, Mr Van der Zijden says, "I am convinced that smart lighting is ground-breaking for the facilities management world.

Just look at the energy savings we have achieved. It is proven that with SylSmart, up to 75% energy is saved compared to a standard on / off system, and about 34% compared to a DALI system due to the fine-tuned network of sensors we have. On top of that, we are moving nicely along to achieving our goal: a climate neutral building by 2020."

SylSmart is an ideal solution for all types of commercial lighting applications. SylSmart Beyond can take your building beyond just lighting efficiency savings.

For more information about our SylSmart solutions visit our website http://www. feilosylvania.com/en-int/solutions-services/ sylsmart/.

> "This project shows that Feilo Sylvania is at the forefront of the smart lighting space. Many people are talking about this kind of innovation, but very few have a commercial implementation out in the field"
>
> **Christian Schraft**, Global CEO of Feilo Sylvania