interact Office

Case study

Atlas: the world's most sustainable educational building

Interact Office at Eindhoven University of Technology

Atlas: 80% less CO_2 emission and 60% saving on energy bills

Eindhoven University of Technology transformed its outdated main building Atlas into a sustainable and future proof educational building. Partly thanks to the connected lighting system Interact Office, the TU/e now has an iconic building that emits 80% less CO_2 and saves up to 60% on the energy bills.

In Atlas, the 4,000 building's occupants control the light intensity in their immediate surroundings themselves via an app, and very soon the temperature too. So, the building's occupants always work in perfect comfort, without much effort at all.

> “Atlas was built in 1963. With this modernization we demonstrate that an old veteran can join the leaders in the field of sustainability.”
>
> Thijs Meulen, TU/e Energy Manager

Interact Office in Atlas

With Interact Office, the TU/e has taken a green step towards sustainability and health. The system comprises 4,400 connected TrueLine LED luminaires with a sensor slot. Each luminaire has its own IP address and acts as an ethernet data point. Half the luminaires are equipped with a daylight and motion sensor, and where possible light intensity is dimmed. The remaining 2,200 free slots are available for future advanced data generation sensors.

Set light and heating via an app

In principle the TrueLine LED luminaires offer 500 Lux. Office workers can vary the intensity of the light, up or down, in their workspace using the app. The app utilizes a coding that the LEDs in the luminaire emit. The user's location is determined through aiming a smartphone or tablet at the luminaire. Following this, the user can use the app to adjust the light intensity. Within the foreseeable future it will be possible to control the temperature of the immediate area using the app. Other possibilities are also being explored, like window controls.

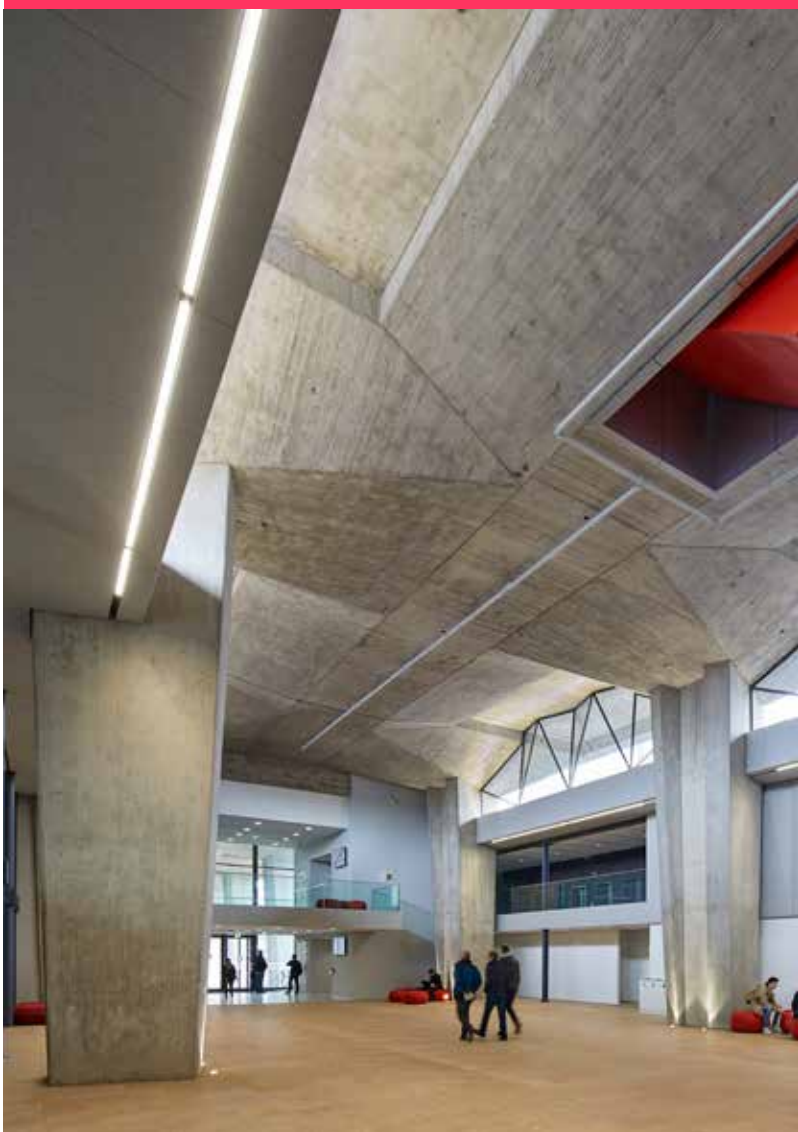
BREEAM Outstanding

According to BREEAM certification, Atlas is the most sustainable educational building in the world. The CO_2 reduction and energy savings have resulted in the award of the prestigious BREEAM Outstanding certificate, the highest attainable BREEAM category. Building managers or project developers with plans for sustainability, who opt for Interact Office are engaging a system with comprehensive potential for achieving sustainability targets.

Intelligent system respects personal wishes

Atlas harbors an important role for the Intelligent Lighting Institute. This scientific TU/e institute will research Human Centric Lighting in this new building, in other words, the effect of lighting on human performance. Interact Office is perfect for this. The Interact Office sensors offer countless possibilities for processing generated data with algorithms. They allow for the lighting and interior climate to be set to the exact wishes of the individual users, and Interact Office can be deployed even more effectively.

> “Light has to learn from the context in which it operates. Interact Office helps us through providing us with data.”
>
> Ingrid Heynderickx, Scientific Director Intelligent Lighting Institute, TU/e



Extreme energy savings

Interact Office delivers up to 60% savings on energy bills for lighting. Interact Office is based on low-energy-consumption LED luminaires. Extra savings are achieved through dimming and employing daylight and motion detection sensors. Building managers who exploit the full potential of the connected Interact Office structure achieve considerable extra savings.

Recognition of building occupants

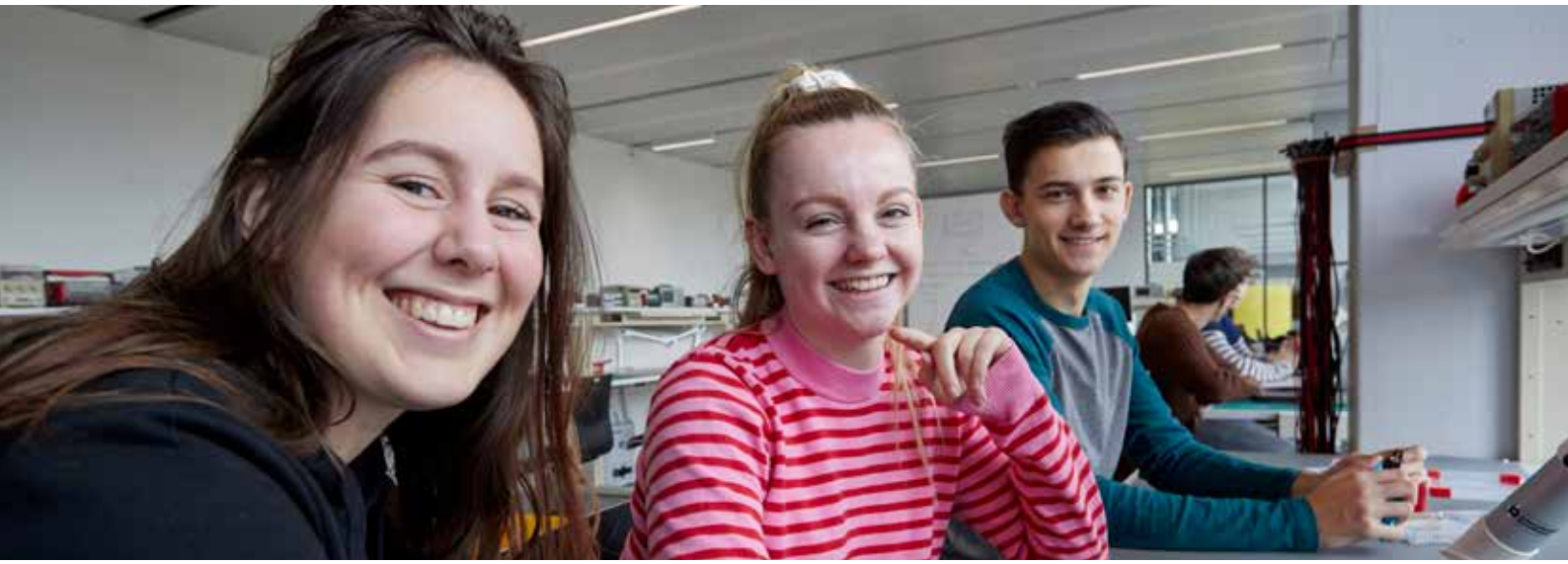
Interact Office offers possibilities for adapting to the wishes of building users. Sensors continuously generate data about the building and use of areas within it. Through processing this information with algorithms, a network is created that increasingly recognizes individual occupants and their preferences and that steadily grows in intelligence.

Ready for IoT

Interact Office is Internet-connected. Through having the luminaires act as ethernet datapoints a finely meshed network is created. Such a network offers building managers an excellent perspective for the future with the Internet of Things, in which data will be employed for better management and control.

More than just lighting

Interact Office is the future. Interact Office only requires a one-time investment in connected lighting, after which future innovation in the field of connectivity within the Internet of Things can be integrated without limitation. Transforming Interact Office into more than just a lighting system.



For additional information about Interact Office
www.Interact-lighting.com/Office

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