

# Case Studies

# **ENTERPRISE CENTRE**

Certified Britain's Greenest Building

AV Infrastructure for Low Carbon Footprint



# Introduction



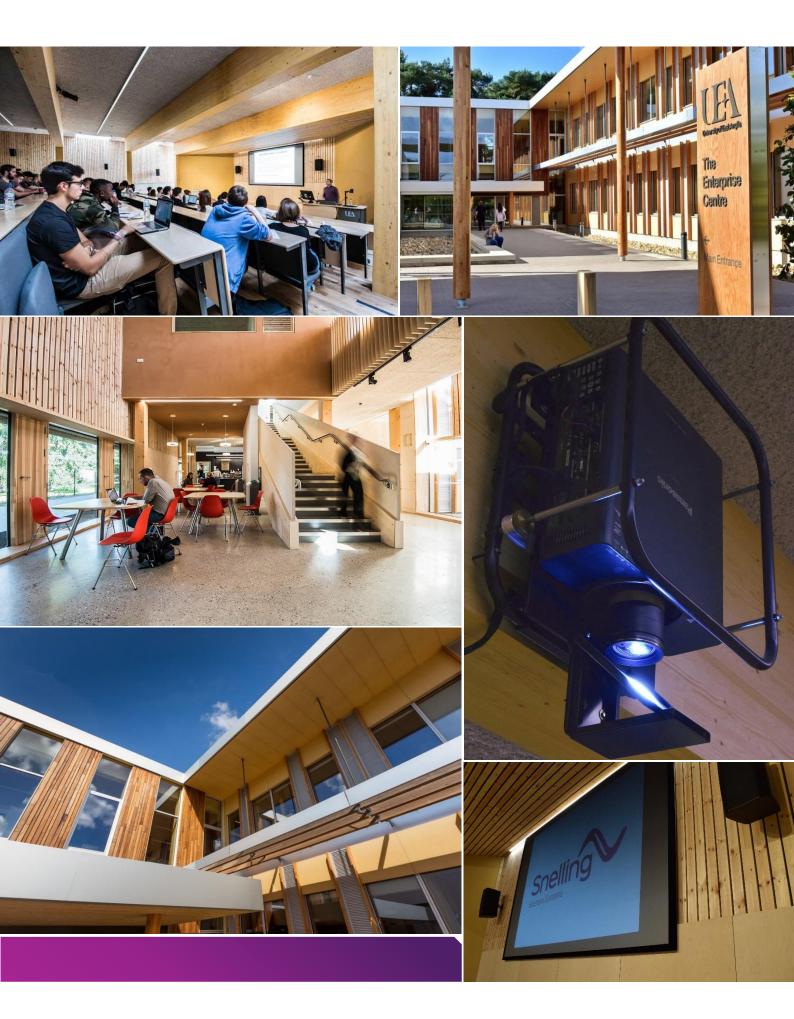




# How can..

AV systems be built for "Britain's Greenest Building" when the client specifies a target of only 168 kg of emitted CO2 (kgCO2e/m2) over a 100-year period?

#SwitchOnthepossibilities





#### **BACKDROP**

At the forefront of climate change and environmental sustainability research, The University of East Anglia have a remarkable record of low carbon efficiency across all new buildings. With an established best-practice benchmark for 'embodied energy' in university buildings of 845 kilos of CO2 per square metre (kgCO2e/m2), the goal for the Enterprise Centre is just 168.

The centre brings together teaching and learning facilities with work spaces for local companies, and an early-stage incubator for start-up businesses.

#### THE BRIEF

Providing for catering and IT equipment, the power consumption specifications in the client brief made the project appear technically impossible. How can AV hardware built into a system contribute to the highly ambitious low carbon goals of the building?

#### THE SOLUTION

While we strictly qualified AV equipment on the basis of lowest power consumption, system design and engineering was focused on remote monitoring and intelligent power management of all connected devices to meet the client's objective.

# After 18 months of testing and evaluation of many ideas, we adopted a two-pronged approach to lower power consumption:

1. Hardware lifecycle: worked with manufacturers to qualify hardware with the lowest power ratings, ISO ratings and which are fully recyclable

For example, laser projectors over lamp, which can be fully recycled. Optical projection screens offer seven times the contrast and twice as bright as standard screens.

**2. Systemsthinking**: we designed and built a bespoke system for active power management.

The entire building operates on three states– Full Power, Typical Power and Full SwitchOff mode depending on prolonged non-usage.

Furthermore, IP power distribution for each room provides two states– Standby and Full SwitchOff for users dependent on use and period (for e.g. holidays).

### Beyond power consumption units

Low carbon footprints extend beyond the power consumption during use, to include the entire lifecycle of AV hardware.

AV hardware units were sourced strictly on the basis of only those which can be returned and fully recycled at the end of life.

Highest possible ISO standards were maintained for all hardware sourced. Maximum possible sourcing hardware locally to cut footprint involved with transportation.

### **Spaces Equipped**

AV infrastructure was delivered for 330 seat lecture theatre, large seminar room, medium seminar/conference rooms, video conferencing rooms, as well as space for brainstorming. The brief also includes digital signage around the building.

#### Certified Green.

All our designs and schematics were approved for Passivhaus standards and achieved BREEAM 'Outstanding' rating (highest possible rating).

## ABOUT US

In plain speak, we are an international supplier of integrated audio-visual systems, environments and communications technology. We design, integrate, install and maintain robust AV systems and environments.

How we do it isn't quiet so plain.

Our roots go back to 1954 when Roy Snelling started his business selling and servicing Television and Radio sets in the early days of broadcasting.

Roy Snelling witnessed a major transformation as more and more TV and Radio sets found a place in homes - there was a whole new way for people to interact, engage and consume information

The same purpose for which AV systems and environments are designed and built for.

As we continued to grow and evolve, we nurtured what we learnt along the way in our internal culture and design/engineering philosophy – for example, 'how AV environments can change the shopper experience to minimise cost, maximise footfall and optimise space utilisation and visual merchandising opportunities'.

At the same time, how do we continue to uphold the Snelling Philosophy? Audio Visual Excellence. Operational Simplicity.

We deliver all aspects of audio-visual integration from design to supply, integration, installation and on-going maintenance - all backed by a service ethic which continues to carry the Snelling signature of quality. Based in London and Norwich, we have maintained our portfolio of major clients and diverse projects across Retail, Healthcare, Higher Education, Corporate, Public Sector, Defence and niche projects.



## **SNELLING BUSINESS SYSTEMS**

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