



**PHILIPS**



University Lighting

# Standing out from the crowd

How to make your campus more attractive  
to students, funders and business.



# Switched on and ready to compete

Higher education is a more competitive market place than ever. Investment in your infrastructure now can pay huge dividends down the line. And lighting is a vital part of the mix.

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Appearance really does count. Visitors will draw conclusions about your university from the moment they arrive and it's hard to think of a more visible aspect of your physical infrastructure than lighting. It makes a statement about your brand and helps show prospective students, funding partners and businesses what sets you apart.

Philips can work with you at every step of the process. Whether it's the initial scoping of the project or the detailed design, our experts can act as partners to ensure optimal results. And if you need to make a business case to colleagues or senior executives, we are happy to help you compile the documentation.

Finance can be arranged to make it easier to approve the upfront investment. If necessary, we can even set up trial installations to show the true value of the LED technology in a real-life setting.

Of course, good-quality, imaginative lighting is about more than just aesthetics. It's fundamental to your reputation and cost base too. Students will be attracted by your green credentials, if you're able to demonstrate that you're reducing your carbon footprint. And as you address your energy consumption, you will also make considerable savings in costs - vitally important at a time when higher education funding is under so much pressure.

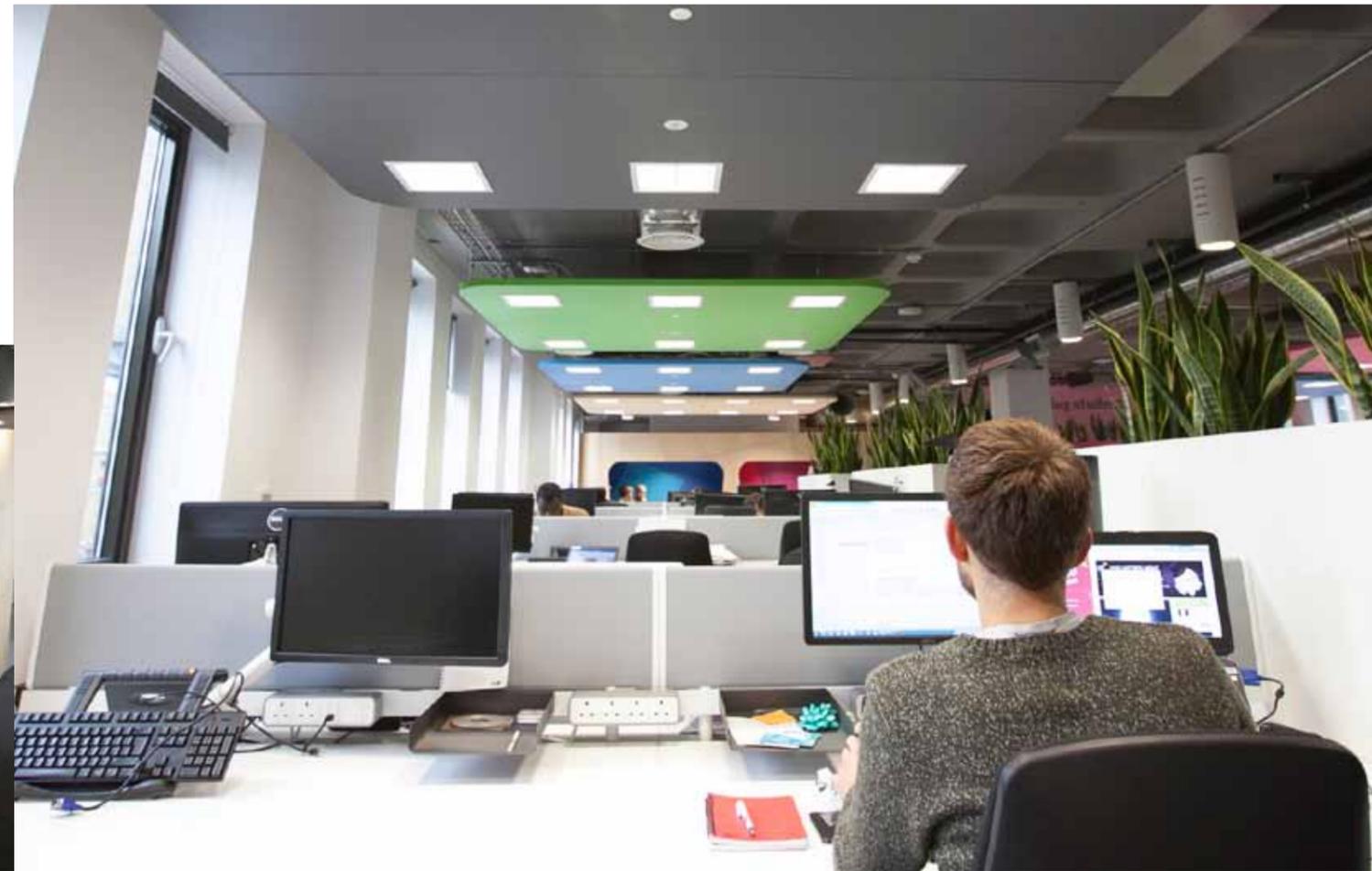
# Optimising your space and promoting learning



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Lighting was identified as an area where improvements in energy performance would also enhance the internal environment.

James Tiernan, Energy and Environment Manager, Unite Students



It's the easiest and most cost-effective way of enhancing your campus environment. You get instant and significant benefits from replacing your lights. And the effects can be seen in many different ways.

The learning environments in universities can often date back many decades. There are, of course, also superb examples of state-of-the-art facilities. No one needs a PhD in architecture to realise which is potentially the most appealing to students, funders and business partners.

#### Transformation at the flick of a switch

Lighting is an extremely cost-effective way of projecting your forward-thinking brand. By adjusting colour and level of illumination, you can take an ordinary-looking space and transform it. As a result, you're able to create all kinds of possibilities: an area people want to hire for a meeting or event, perhaps, or somewhere students find they are able to study more productively.

#### One space – multiple uses

With new lighting technology, a regular lecture room can quickly become a multi-media theatre. A reception area could be transformed to reflect a particular event,

such as a reception for a specific department or the arrival of a new cohort of students. By changing colour or intensity of the lighting through controls, you can help to create an ambience which stimulates debate or delivers a calmer mood.

#### Save energy and reduce cost

Without lighting controls and with old-fashioned, energy-hungry lights in place, your energy bills and carbon emissions quickly start to soar. By addressing your consumption, you'll not only reinforce your green credentials, but also save significant sums of money.

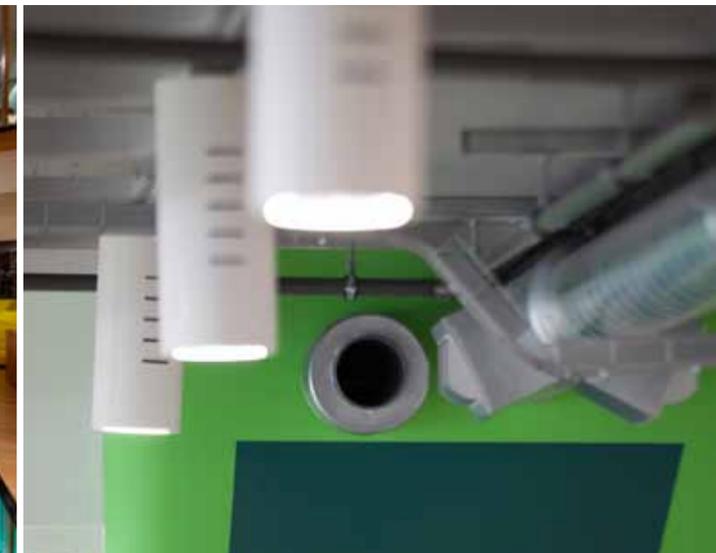
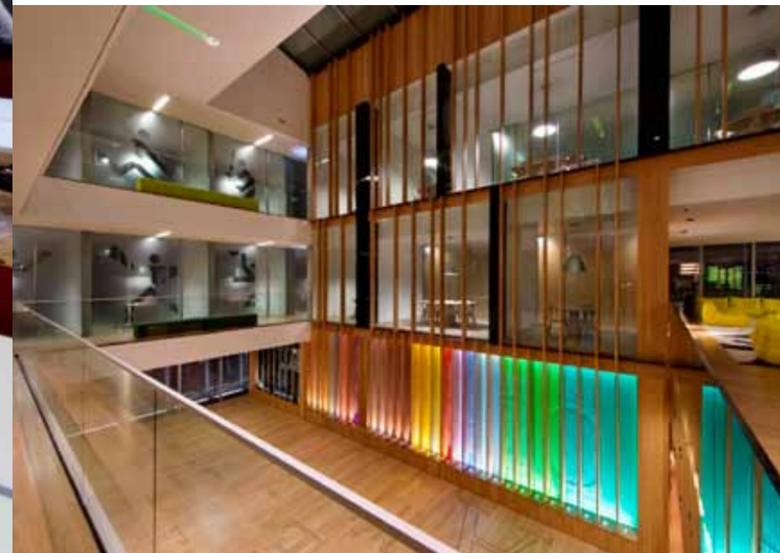
The good news is that return on investment is both instant and tangible. As soon as you make the switch, you start to save. Often, within a three-year time frame, you will have recovered your initial investment entirely, which makes lighting a particularly easy and cost-effective way to demonstrate commitment to sustainability.



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It is a partnership. We work together to identify ways in which we can reduce our energy consumption – so helping the planet, but also reducing our cost. And we share the benefits of that with Philips.

Dave Farbrother, Director of Finance, NUS



# Your facilities brought to life

When prospective students and their parents – or potential business partners – visit your university for the first time, their initial impressions really count. Light can play an important role in setting you apart.

## Enhancing your estate

With LED technology from Philips, you can transform a space instantaneously through the creative use of colour and light levels. You might choose to reflect your brand identity through light, for example, or create a particular mood or ambience for an event. It's also a shrewd financial move. By making your buildings more sustainable through long-life, low-maintenance lighting, you can increase asset value by up to 16%.

## Attractive to business

When you're seeking corporate partners for long-term relationships or particular projects, it's important to give the right impression. You may also be hiring out your facilities to businesses for conferences and meetings, so the more flexible and high-tech they are, the more likely they are to attract potential clients.

## Easier and less costly maintenance

Because LED technology is so long-lasting – and, thanks to digital controls, you're able to apply light only where it's needed – maintenance is kept to a minimum. Not only does this greatly reduce cost, but also cuts down on the inconvenience of accessing lights in areas of the campus that are hard to reach, such as high-ceilinged sports halls or student accommodation.

## Simplicity through standardisation

When you standardise your lighting and controls across your estate, support teams become more familiar with the products and it's easier to test, select and deploy them across a range of locations.

## Improve productivity and creativity

Students often find that well-designed and well-lit spaces are more conducive to study and promote a sense of wellbeing. You also have the additional benefit of providing a more attractive working environment for university staff. Imagine the flexibility of being able to adjust the light in a particular presentation to students or refocus it for an intense classroom or laboratory task.

## Managing your light

Because lighting accounts for around 23% of a university's energy costs, reducing consumption is obviously a priority. A lighting management system allows you to see the amount of energy being consumed in different areas and you can then make intelligent judgements about whether timed switches, presence detectors or dimmers might be of value. It's also possible to harvest daylight to reduce the need for lighting.

# Enhancing your reputation for **responsibility**

Today, it's commonplace for both students and potential investors to look for evidence about your record on corporate social responsibility. Being able to demonstrate your commitment to sustainability will help you to enhance relationships with stakeholders, access research funding more readily and strengthen your overall brand identity.

### But what role can lighting play in this process?

By introducing more energy-efficient LED systems, you can reduce your consumption and carbon emissions, showing that you're making a positive environmental impact. At the same time, this will help you comply with regulatory targets, codes and initiatives which are more than ever in the public eye, including the Carbon Reduction Commitment, Energy Performance and the Building Directive and Energy Services Directive. With the support of Philips, you can also work towards compliance with BREEAM Ratings and CIBSE guidelines.

### Simple steps to reduce carbon and energy

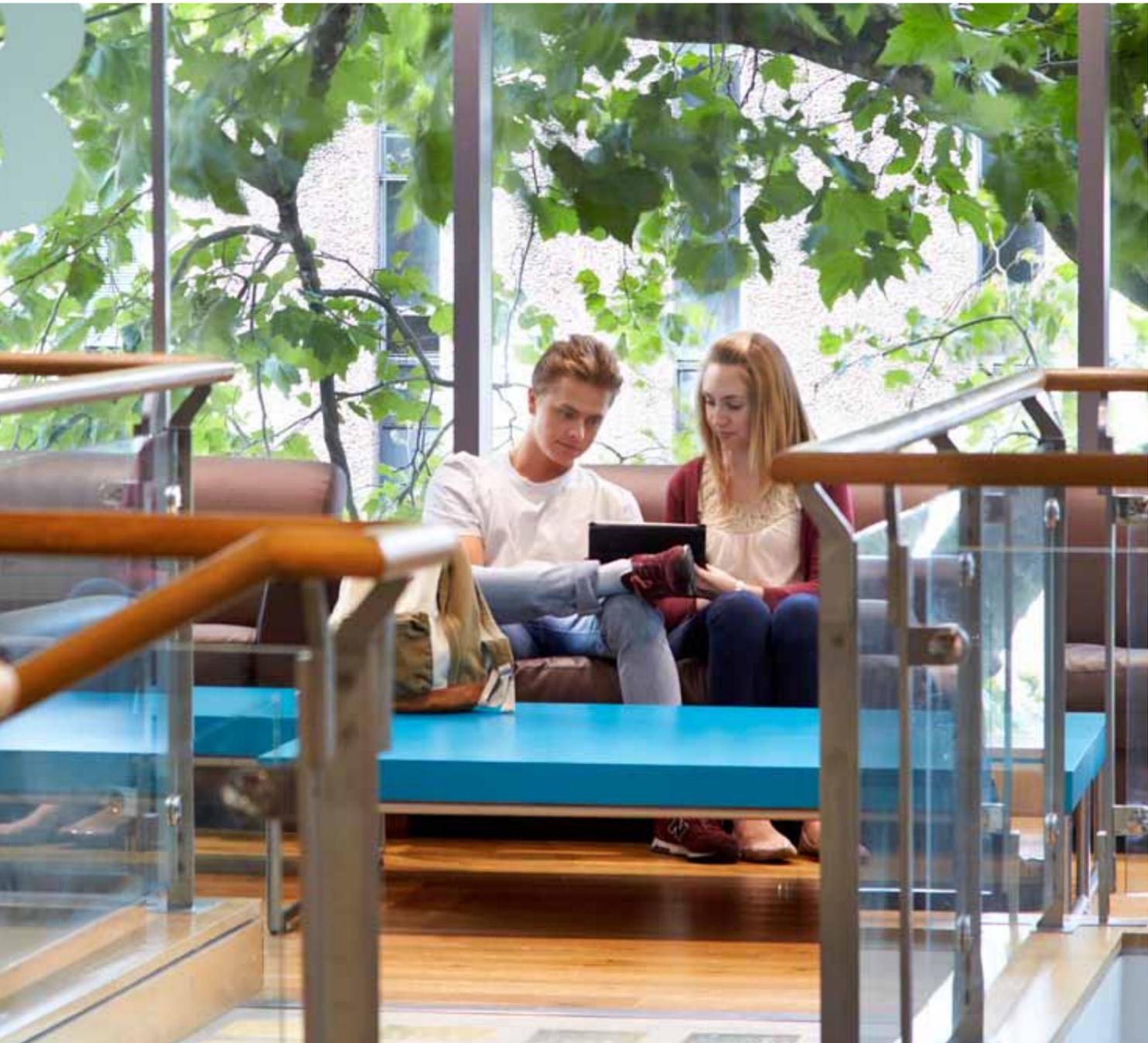
We all leave lights on when we shouldn't, but it becomes a major issue for large organisations. Some offices are illuminated around the clock for instance, while the staff members are only present for 25-30% of the week.

Although technology is readily available to deliver considerable savings in energy and cash, research still indicates that more than three quarters of Europe's educational institutions are using inefficient, outdated systems.

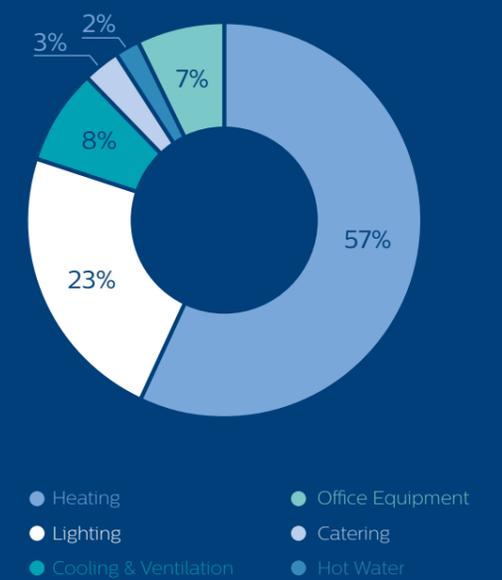
With LED lighting and controls, you can programme lights to turn themselves on and off at particular times. Through presence detection, it's possible to dim or turn out lights when no one's around, but bring the light up instantly when movement is detected.

With lighting management systems in place, you'll have the occupancy data at your fingertips to make intelligent decisions about your power use. As a result, you will not only create better building efficiency and save energy and cash, but can also cut down on heat, as LEDs are much cooler than traditional lighting. This, in turn, may reduce the need for air conditioning.

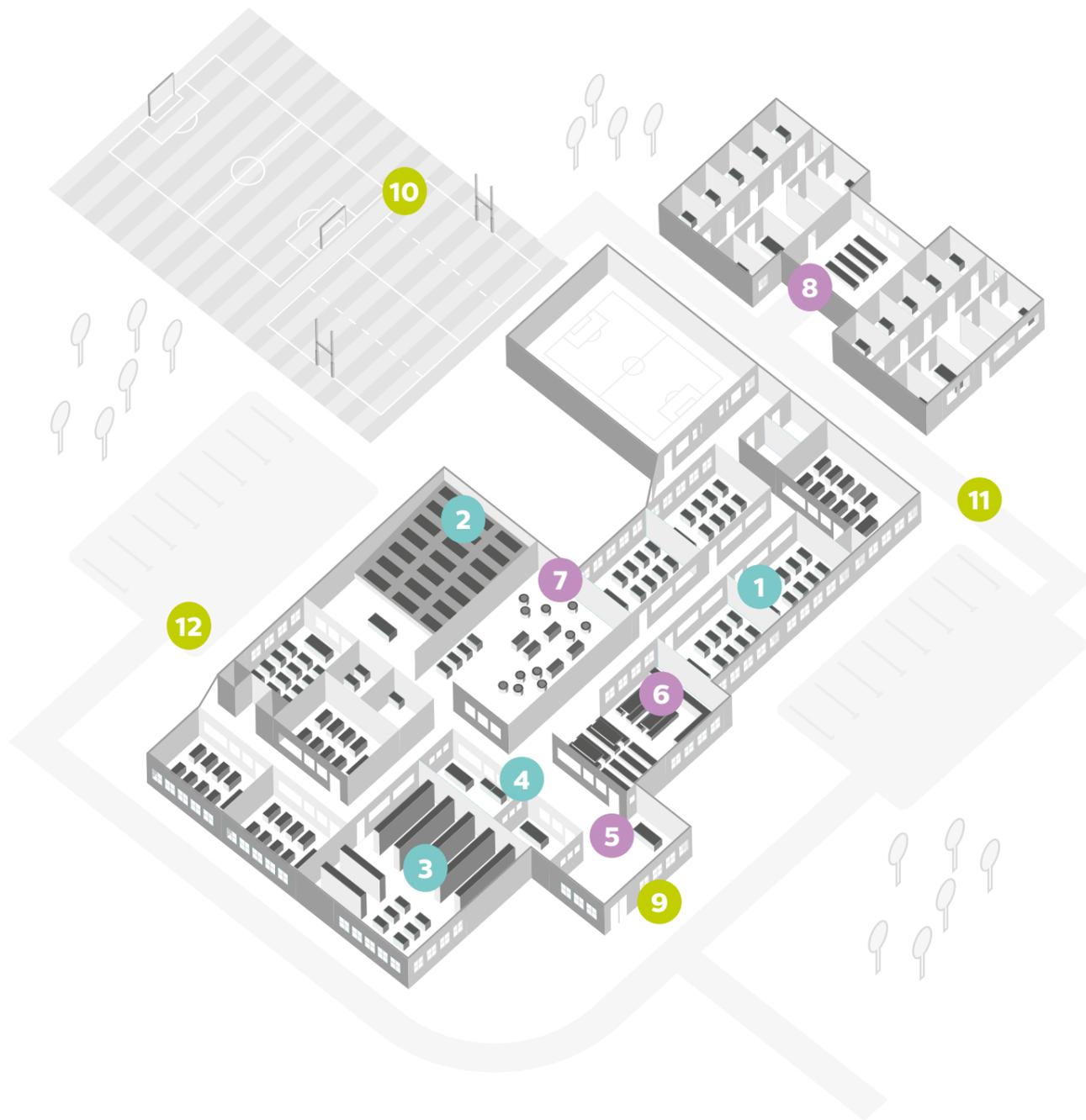
It's a positive feedback loop, in which one environmental improvement leads to another. You'll even end up reducing landfill because of long lifetime of energy-efficient lights.



Breakdown of CO<sub>2</sub> emissions for a typical University campus



# Key lighting zones



Modern lighting and programmable systems can make a difference to every area of university life. To highlight the benefits to your institution, we've divided the campus into three distinct zones.

## Learning

Transform the areas in which staff and students learn and work



1 Teaching rooms / Laboratories

2 Lecture theatres

3 Libraries

4 Offices

## Social

Bring communal areas of the campus to life



5 Entrance / corridors

6 Refectory / café

7 Student union

8 Accommodation (halls)

## Outdoor

Create a safer and more vibrant environment across the university



9 Facades

10 Sports fields / courts

11 Walkways

12 Car parks

# Inside the university



Lighting is an excellent way to modify the spaces in which students learn and the areas in which your staff work. **Help them to experience education in a new way.**

#### Teaching Rooms and Labs

Good quality, controllable lighting in teaching environments has been shown to improve students' engagement and overall experience. European test results suggest that adjusting the light at different times of the day, or for different activities, can aid concentration. Ideal for complex lab experiments or periods of more intense study.

#### Lecture Theatres

Effective lighting helps set the stage for a lecture presentation and can work in different ways alongside use of the whiteboard, films or practical demonstrations. It's worth remembering that flexible, hi-tech presentation spaces are always in demand from external organisations too, so your investment may create a new revenue stream.

#### Libraries

A modern university library should be brightly lit, enabling comfortable, easy reading, without any glare. We can help you 'harvest' daylight too – dimming your lights and reducing energy consumption during periods of bright sunlight.



#### Offices

Your staff need bright enough light to perform a range of tasks, but will quickly become irritated by an environment that's so bright it causes glare. Adjustable lighting means you can potentially optimise the environment for particular times of the year. Greater levels of blue light on dull winter's day, for instance, are known to promote alertness and concentration.

# Around the campus



The general environment of your university is just as important as the classrooms and labs in terms of your brand image. From an energy-saving perspective, it's also important to address areas of the campus which use a great deal of light.

#### Refectories and cafés

The good colour rendering of LED lights means that you can enhance the appearance of food to make it look even more appetising. And because LEDs emit virtually no heat, snacks and meals stay fresher for longer too.

#### Student accommodation

Lighting systems in student halls need to be flexible and robust. Our systems are tamper resistant and also low maintenance, which means you don't have to cause disruption by intruding on students to make repairs or replace lights. With self-testing functionality, the lighting is able to diagnose problems itself and report any issue electronically, giving you peace of mind over safety.

#### Student Union

It's important not to overlook the student union. After all, it's the place in which the majority of your student population will meet, drink and socialise. The flexibility of modern lighting allows you to adjust the ambience for specific events and to cut back on energy bills.

#### Entrance and communal areas

From the moment visitors arrive, they are forming instant impressions. You need a 'wow' factor to your reception and the communal areas of the campus. It's a great way of instilling confidence and reassuring people about the character of your academic environment.





# Beyond the buildings

Universities are more than just the lecture halls, laboratories and communal parts of your buildings. The identity of your institution is also reflected in the exterior of buildings, walkways, sports facilities and car parks.

#### Facades

Lighting the facades of your buildings in an interesting and eye-catching way can have both a functional and decorative effect. Change the look to tie in with specific events in the university calendar or to reflect your distinctive brand identity.

#### Sports facilities

All sports halls and courts need to be well lit from a safety perspective to create a shadow-free playing environment. You also want to be sure that lighting materials are impact-resistant.

#### Walkways

Safety for students, staff and visitors is of paramount importance, particularly during the winter and hours of darkness. Our LED walkway solutions offer improved colour rendering and ensure there are no 'dark spots'.

#### Car parks

With bright white LED lighting in the university car park, you can judge distance a lot better as a driver. For pedestrians, shadows disappear and it's easier to see movement and colour. Our solutions are also waterproof, shockproof, dustproof and vandal resistant.

# Providing you with a total solution

When you're rethinking lighting across a university campus, we fully appreciate it's a significant investment. While we know that the case for energy and cost savings is compelling, you need to ensure that you have buy-in from senior management and that the project is planned in a way which maximises value at every level.

There are big advantages to thinking about your lighting as a whole and taking action across the whole of your estate at once. That way, you can ensure you maximise the benefits in terms of aesthetics, cost-savings and the environment. We call this approach a 'total solution' and work closely with you at each stage in the process – from the initial scoping through to the design and delivery. We are also able to assist with finance and ongoing support.

Our experts analyse your existing lighting system and examine all the possible solutions in accordance with your objectives and constraints. We then share with you our recommendations in terms of energy efficiency, improvements and maintenance.

Our end to end approach means you no longer have to manage the various professional elements required to implement your new lighting system. Specialist teams manage the entire process from design through to activation.

To secure your investments and guide you through the latest technological developments in lighting, we have a range of performance-driven services and financing options.

It's worth remembering that as a diversified technology company, with a first-class reputation for healthcare and consumer lifestyle products as well as lighting, Philips can help equip your campus in other ways too. In fact, we're the obvious choice for everything from coffee machines to defibrillators.



## Unite Students

Unite Students is the leading operator of purpose-built student accommodation. Philips is working alongside the organisation to transform over 120 properties in 23 UK towns and cities. The project will involve 300,000 new light fittings and 85,000 sensors and dimmers.

In each of the sites, the entire lighting solution not only minimises the building's energy consumption, but will also dramatically lower expenditure by lasting longer than previous solutions and for many years beyond traditional lighting fixtures. In addition, the new lighting offers improvements in uniformity, quality and control of light, giving students an environment conducive to study and learning.



## National Union of Students London

When the NUS purchased Macadam House on London's Gray's Inn Road, they wanted to turn it into one of the most sustainable offices in the UK. A raft of design features minimise energy consumption and carbon emissions.

All of the lighting is fully controllable, with links to daylight and occupancy sensors. The sensor and dimmer settings can be adjusted to fine-tune the lighting and reflect changes in levels of use within the building. It's an ingenious and innovative solution which has emerged thanks to the close partnership between NUS and Philips.





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