Using **UMA Vision** to Achieve **Net Zero** in Your Campus Buildings

IN AN INCREASINGLY AI DRIVEN WORLD, DATA CAN ENABLE GREAT THINGS TO HAPPEN

Whether it's tracking prices on comparison websites, monitoring financial transactions, or major sports teams tracking transfer targets, when used correctly data is a force for informed decisions that lead to better outcomes. These are not assumptions, these are data-proven results set against the outcomes achieved previously.

For any comparisons to be reached, the new data set must have an older data set to compare itself to. An existing data set then allows meaningful goal setting to be determined, and the subsequent data set gives transparency to the effectiveness of the actions implemented to achieve those goals.

Net Zero is no different. The long-term goal of zero emissions is clear, but where are today's data sets that show the current performances of campus buildings, from which the actions to reach Net Zero within a given time frame can be implemented?

For the most part, the baseline data required as a starting point, is missing throughout the Tertiary Education Sector.

The Royal Anniversary Trust's 2023 report – ***Accelerating the UK Tertiary Education Sector Towards Net Zero*** (A sector-led proposal for action and connected thinking) – which time and time again highlighted the lack of accurate and comprehensive emissions measurements, removing the ability to have a consistent baseline and resulting in a fragmented approach to tackling carbon footprints.

The report goes on to ask how, without this transparency of such metrics, goal setting can be effective and achievable.

In fact, the Trust's report lists four out of its six ***"Principles for Net Zero Emissions"*** as:

- Standardised reporting
- Sector Collaboration
- External Partnerships
- Accelerated Decarbonisation

All of these objectives would be massively assisted by having consistent baseline data across the Tertiary Education Sector – data that **UMA Vision** can provide.

In other words, before you can implement effective decision making to tackle Net Zero, you must have the data that allows you to understand how your buildings are performing today. Only then can you maximise the endeavours required to achieve your Net Zero objectives.

In order to meet both individual and sector-wide Net Zero goals, it is crucial for each higher and further education building to prioritise sustainability and strive for the highest level of performance.

ask UMA.ai

OPTIMISING SPACE FOR EFFICIENCY & SUSTAINABILITY

UNDERSTAND THE PERFORMANCE OF YOUR CAMPUS BUILDINGS

New buildings benefit from sustainable construction standards based on proven data, as well as optimising interior designs and timetabling to encourage greater student utilisation rates.

For existing buildings, the picture isn't so clear. Accurate and comprehensive emissions and occupancy measurements are essential, because if you haven't got the data to understand how efficiently your buildings are performing now, how can you possibly know if future actions are delivering improvements? And let alone know if those improvements are radical enough to achieve your Net Zero ambitions?

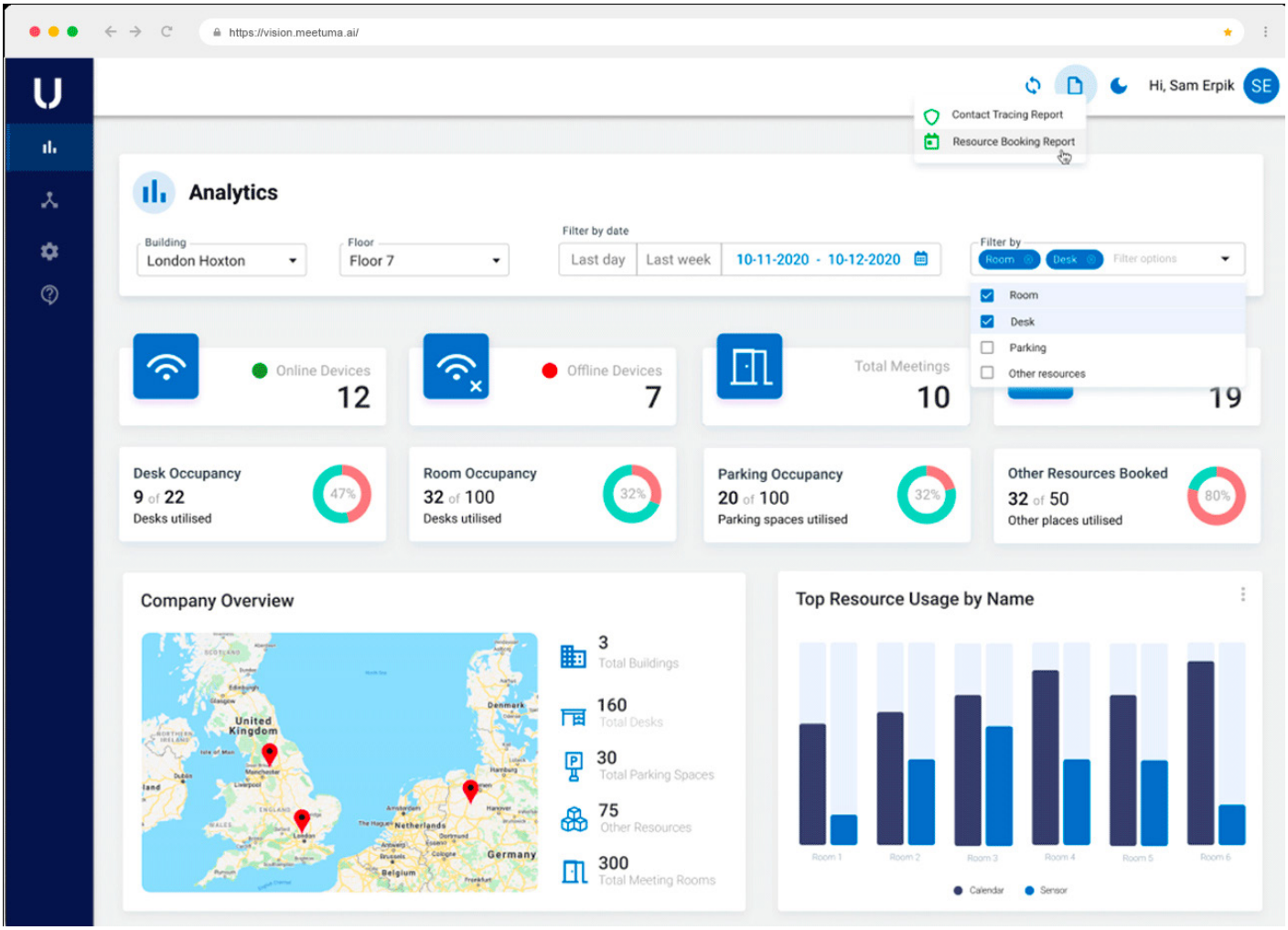
MAXIMISE YOUR STUDENT OCCUPANCY LEVELS

Timetabling data will only provide you with the planned usage of bookable classrooms and lecture halls. With UMA Vision's monitoring and AI-predictive software, you will be able to understand how your buildings are performing in real time today, giving you the data necessary to increase occupancy and utilisation levels.

ACHIEVE NET ZERO AND SUSTAINABILITY TARGETS

Having data on utilisation rates and energy consumption will allow strategic decisions for achieving Net Zero to be formulated and implemented; based on facts, not assumptions.

Sector Collaboration – one of the Royal Anniversary Trust's six ***"Principles for Net Zero Emissions"*** – will ensure that effective outcomes reached at one campus can be applied across other institutions. But that benefit will be more far wide reaching and impactful for society in general, as every individual and organisation have their own part to play to address the climate emergency that impacts on everyone.



Give YOUR Campus the askUMA Advantage

askUMA (a UK Company) provides a single software platform – **UMA Vision** - that can capture the data from multiple sources; your room utilisation, educational technology, and the building's real-time environmental performance (heat, CO2, humidity, etc.) to give you the whole picture about the total functionality of your building(s) in a single dashboard.

It's only when you have this baseline — the empirical evidence — that senior leadership teams can begin to understand the correct decision-making required to implement the measures necessary for changing behaviours and delegating accountability.

UMA Vision offers a fully scalable approach enabling each user to activate only the modules that are relevant to them. For smaller and specialist institutions, this can reduce some of the barriers to entry that alternative solutions typically pose — often requiring two or more independent software platforms.

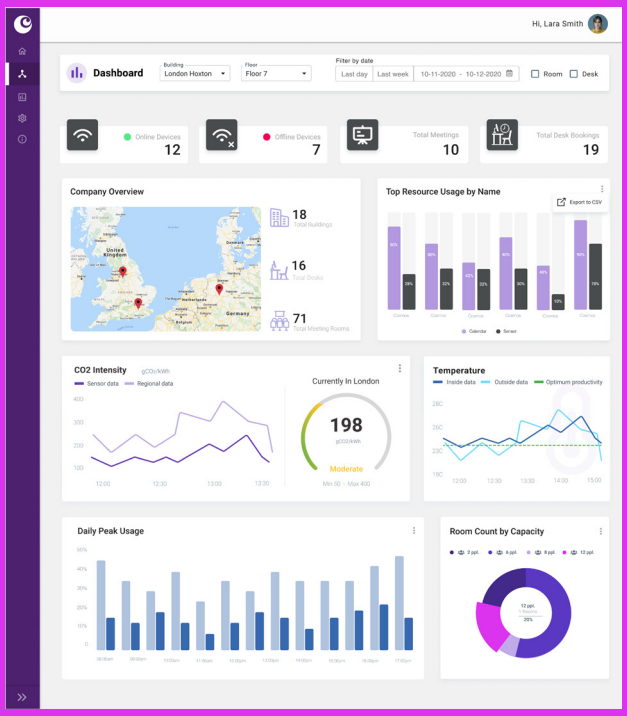
Strength across the Sector

Energy data, in conjunction with building utilisation levels, is crucial for individual universities and colleges to establish their own journey towards Net Zero and developing data-led plans on building use and energy.

The value of data goes beyond the immediate outcomes of actions taken. By sharing successful practices, data can inform the sector about what strategies are effective, thus improving standards universally and ensuring consistent application of impactful actions.

Beyond the HE and FE sectors, this work has the potential to equip other parts of our economy and society, both the public and private sectors, with the knowledge and behaviours to implement their own actions required to achieve their own sustainability targets.

With effective collaboration and resourcing, the UK Tertiary Education sector can become the world leaders in achieving Net Zero, demonstrating expertise in both sustainability and energy security.



Example of the AskUMA Net Zero Dashboard

Beyond the Campus

And what about student housing? Whether on or off-campus, whether managed by your institution or the private sector, should it be included in the Net Zero calculations associated with a student's enrolment at your institution?

Environmental sensors that monitor energy usage and other metrics can easily be deployed across a range of spaces. They can have the added advantage of detecting other issues, such as damp that can cause mould and adverse effects for both health and property conditions, resulting from poor ventilation or insufficient heating.

Embrace Hybrid Learning and Eliminate Uncertainty

Learning spaces are not restricted to classrooms and lecture halls, especially where small group active collaborative pedagogies engage students to work together outside of tutor contact hours. Most campuses now feature a diverse range of groupwork spaces in libraries and informal areas. One frustration is arriving to use a space and finding they are all taken, or students hogging a collaborative space for the whole day when some of the group have left to attend classes before returning.

That lack of certainty wastes resources, when just one or two students are utilising an area with a much greater capacity, increases unnecessary travel for a wasted trip to campus, and results in a poor student experience.

Instead, you can use UMA Vision to cultivate a campus that enables your students to excel and prioritises a positive student experience. UMA Vision's workplace management tools provide the same benefits to education campuses; booking of classrooms and informal spaces, obtain a deeper understanding of how students are using the campus, and use that data to create improvements.

UMA Vision's AI tool can analyse your data to offer predictive recommendations for additional enhancements.

How does askUMA help?

askUMA is a single fully integrated AV and smart building management system that provides the tools you need to make your buildings and campuses perform at their best.

UMA Vision incorporates data gathering capabilities into a single solution that previously may have required two or more different platforms to achieve, enabling you to have the live and historical data combined within a single dashboard to demonstrate your actual use compared to your intended use, and giving you the power of predictive forecasting.

The data metrics are the insights that you must have in order to make the changes necessary to achieve your requirements, and the evidence that your requirements are being met.

The data you need comes from your actual space usage, which can be very different from what was intended originally, and co-exists with data on energy consumption along with the indoor air quality. Simple IoT sensors provide real-time measurements of heat, humidity and CO2 levels which, when optimal, positively affect levels of concentration and well-being — great for helping students to achieve their intended learning outcomes. ▶

Will I be locked into a 100% proprietary system?

Not at all. UMA Vision is very AV / IT friendly and ISO27001:2022 Certified

Being an open platform, UMA Vision already works with the leading enterprise AV and IT vendors for integrations with many existing room booking panels, IoT Sensors, video platforms and much more. UMA Vision is a certified Cisco Partner, with integrations to Webex Control Hub utilising the built-in sensors on Webex devices whether being run in native Webex or MS Teams modes. Additionally, UMA Vision is a Meraki Partner integrating with sensor hardware to report critical ESG metrics and improve resource use.

Achieving Net Zero Will Require Change

Unless we change many different behaviours, in more areas than just our buildings, Net Zero will be unattainable. UMA Vision provides stakeholders with the data-driven insights that will help inform the necessary decisions to make campuses more efficient.

The push for Net Zero goals undeniably requires a comprehensive reassessment of Campus Management Strategies. This means that previously separate AV, IT, and Smart Building systems must now merge, as they cannot operate in isolation from one another if we seek to achieve optimal outcomes in today's interconnected world.

This is the time for AI to provide you with insights derived from historical and real-time data analysis, in conjunction with the real-time environmental properties in your teaching and social spaces, enabling you to get ahead and shape future requirements before they manifest themselves as problems needing to be solved.

Now is the time for UMA Vision's AI Platform to help you proactively meet the complex challenges of todays and tomorrow's campus management requirements, instead of waiting to react after problems have caused widespread student dissatisfaction.

AI is accelerating the pace of digital change. No longer will tinkering around the margins with what we already have be either the default position, or a sensible option. Increasingly our interests will be best served by discontinuing the current way and to start over again, with AI the gamechanger that will enable these wholesale changes for the benefits they will quickly deliver.

In short, our needs and expectations have changed so much that just upgrading what we already have doesn't make financial or operational sense.

This is the time for AI to provide you with insights derived from historical and real-time data analysis

Does that sounds like a steep learning curve?

Not at all. Firstly, askUMA gathers all the data you generate together in a single dashboard so you can determine your strategy and actions based on the facts. Secondly, you can proceed at your own pace, starting with just a single module and, when appropriate, adding additional modules.

Use and only pay for the functionality you need now, when you're ready simply add additional askUMA resources to bring enhanced capability into the mix. ■

Here's the Bigger Picture

WHERE PEOPLE COUNTING IS JUST THE START OF IT

People Count

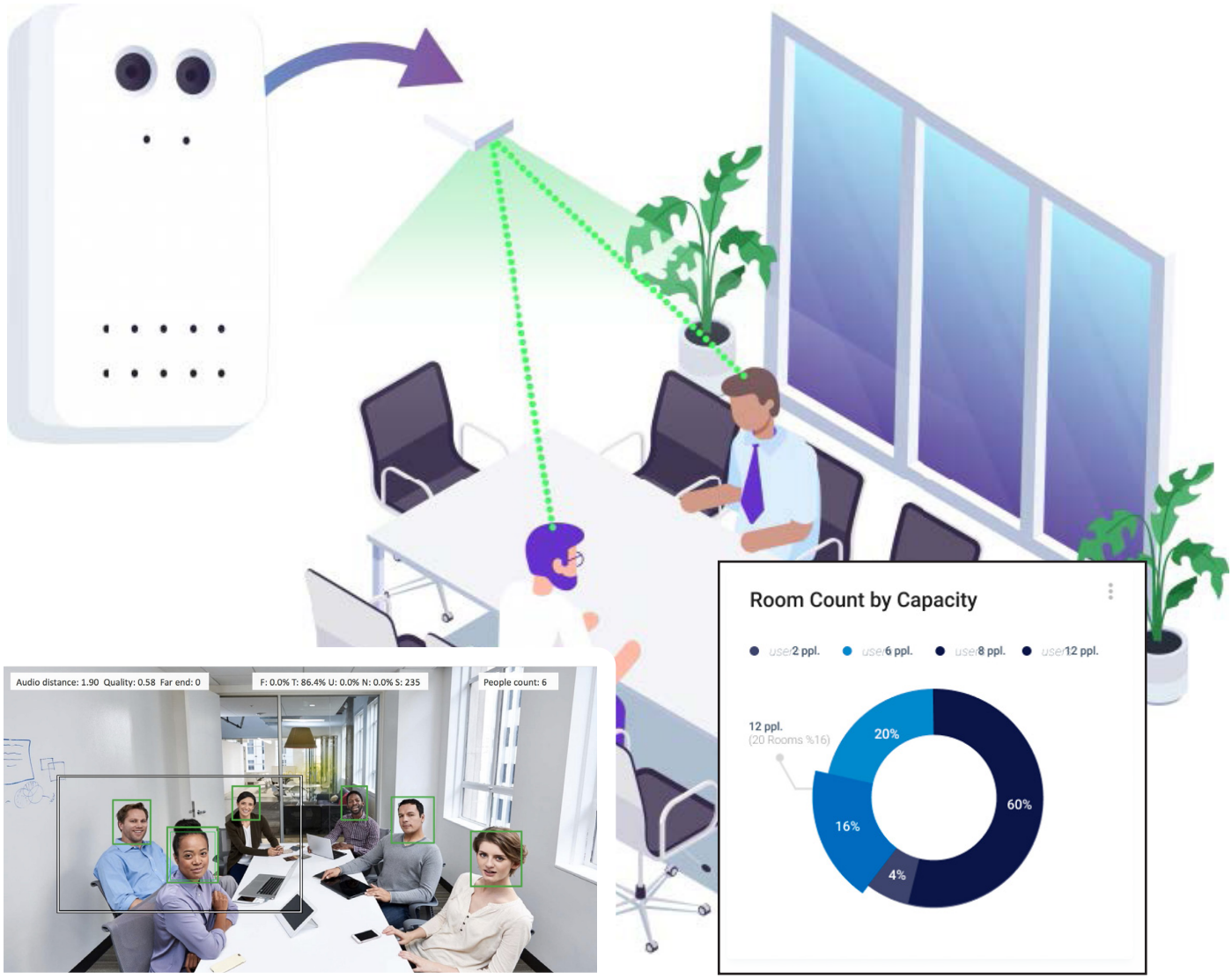
Using already present CCTV, lecture capture and video conference cameras, UMA Vision offers a comprehensive people counting solution that helps to manage occupancy levels in real time. This allows for informed decisions about managing your campus. With historical occupancy data, you can analyse trends and make data-informed decisions regarding future learning and social space requirements. Teaching rooms and social spaces that are under or over-utilised can be quickly identified and changes to improve efficiency and productivity introduced.

In the event of a future pandemic or another incident that restricts gatherings, UMA Vision's real-time people counting module can ensure compliance with safety regulations designed to keep people safe.

Activity Based Learning

Increasingly, learning spaces are being determined for the outcomes that are required, with different tasks prompting a variety of designs; collaboration spaces, open-plan desks, private study rooms. Creating zones for these spaces allows tutors to request a zone that best suits their students' needs, providing a solution for grouping students who work together on projects.

UMA Vision supports a wide range of customisation, allowing you to add tutors or students to logical groups and, if necessary, to restrict bookings to specific areas. Overall, UMA Vision is the perfect solution for implementing and supporting activity-based learning, going beyond the standard Active Directory sync and empowering truly collaborative learning groups in designated zones.



People-Counting Solution with IoT Sensors

Air Quality Monitoring

Student wellbeing, which affects their learning outcomes, is directly affected by the environmental conditions in learning and social spaces. The effect on humans of rooms that are too hot or too cold is well understood, as well as impacting on energy consumption, but more recently we've become aware of the detriment to learning in education when CO2 levels are too high, and students lose concentration. In extreme cases, there is also a long-term risk to health from being exposed to such conditions.

UMA Vision collects the Indoor Air Quality data from IoT sensors, either specially provided or those already integrated in meeting room technology, such as large format displays and soundbars. This real-time data allows organisations to automate real-time corrections, creating a healthier workspace that improves overall productivity and engagement.

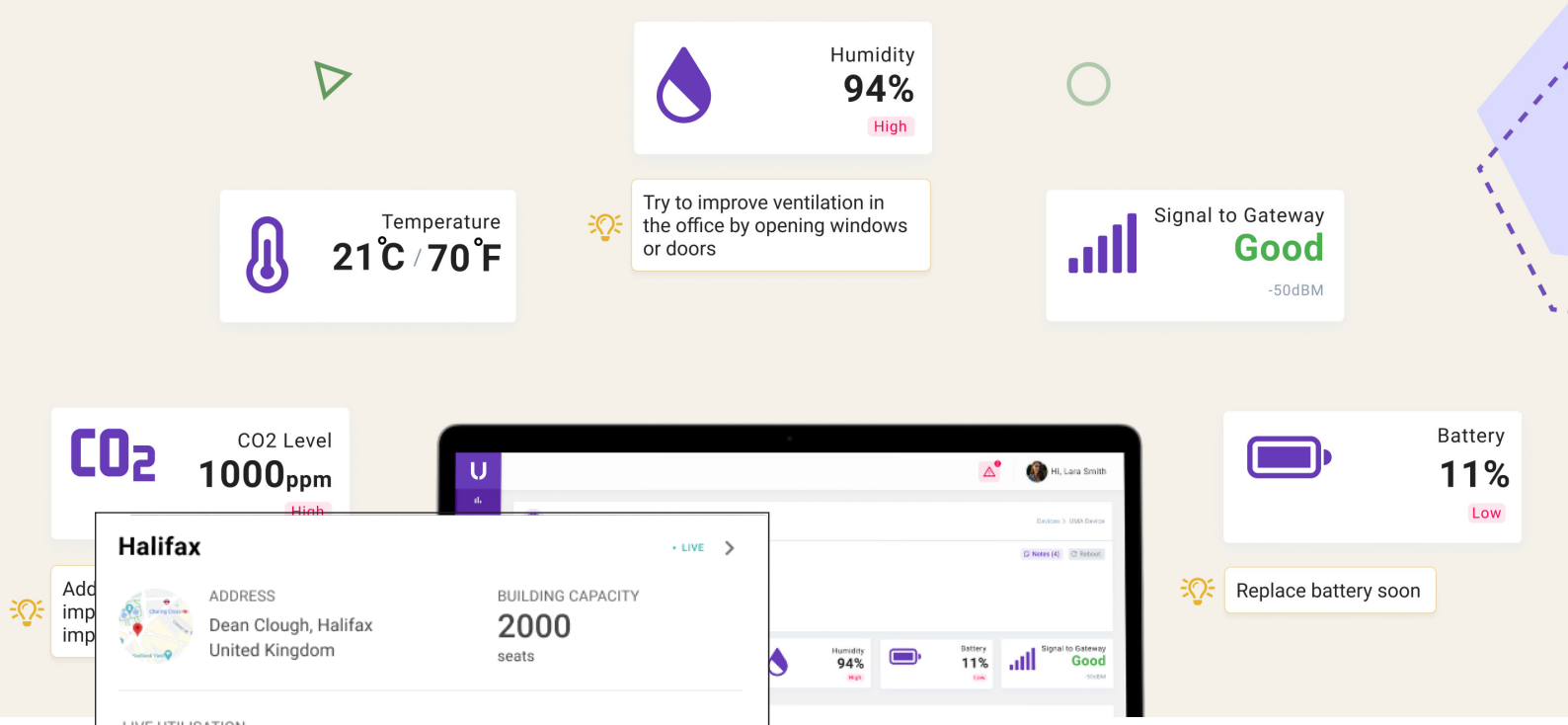
Energy Monitoring

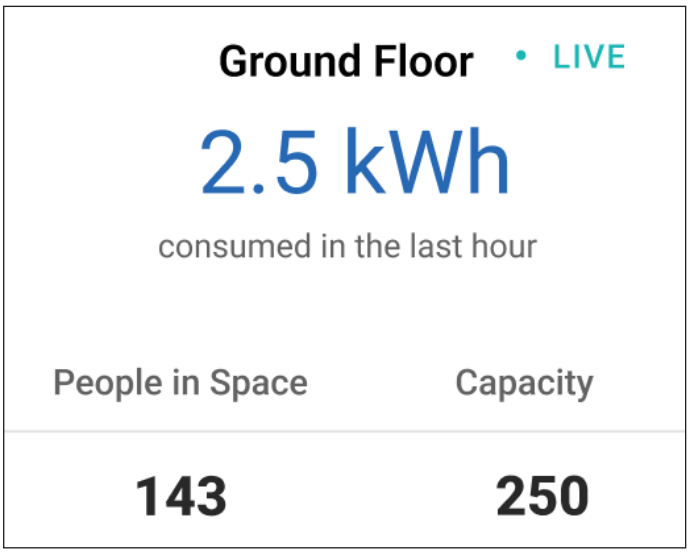
Complementing UMA Vision's core functionality for creating compelling learning environments to enhance the student experience, is a suite of energy monitoring features. These insights, showing actual real-time energy usage, provide the basis for data-driven decisions around energy reduction, with positive consequences for energy bills and lowering carbon consumption.

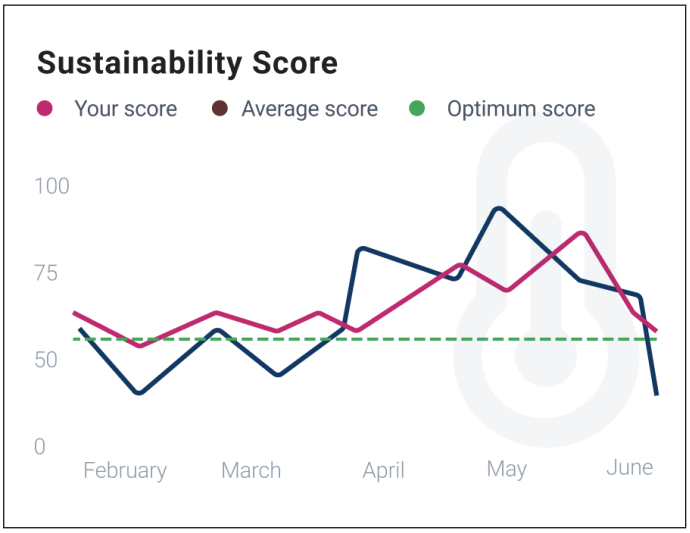
Whatever your ESG, Net Zero or Sustainability targets, data-informed decisions must be at the basis of positive actions to reduce the environmental impacts of incorrect workspace usage.

Analytics and Reporting

Core to the UMA Vision's platform is a robust reporting and business analytics tool that each and every UMA Vision module you have feeds into. Now you can ▶







understand precisely how your learning spaces and offices are used and, where necessary, you have the metrics to inform positive change.

Historical data, for example, can compare booking data with intended use, with the actual occupancy based on the real-time people counting at the time. UMA Vision has developed, and will continue to develop further, robust AI algorithms that use historical data to make proactive recommendations on potential workspace optimisations.

And remember, UMA Vision is not just about space utilisation. The bigger picture includes taking Indoor Air Quality and other environmental data (heat, humidity, CO2) and cross referencing this data with occupancy data to improve air quality and better ensure that your students are working in a healthy environment that allows them to be productive.

And if you feel your reporting needs a more dynamic thrust, UMA Vision's flexibility and interoperability extends to exporting data to Power BI and a range of third-party reporting tools for the creation of customised reports and dashboards.

However you generate your reports, UMA Vision's ultimate aim is for organisations to have the very best insights into how their workspaces are performing now, because only then can informed decisions be made to create ever more productive and connected workspaces that work hard for you. ■

ask UMA

ABOUT askUMA and UMA Vision

Our Vision is a world where every space is maximised for meeting, collaboration, and sustainability, ensuring no waste, no lack of resources, and minimal environmental impact.

We empower customers to Utilise their spaces, Manage integrations and Analyse data efficiently through our innovative SaaS platform, UMA Vision, driving sustainability and operational excellence.

UMA Vision stands out as a pioneering room and desk booking platform, uniquely designed to monitor ESG indicators in real-time. It keeps a vigilant eye on temperature and energy consumption, empowering organisations to enhance operational efficiency, champion sustainability, and achieve ESG objectives.

Opting for askUMA means you're not merely selecting a platform; you're adopting an all-encompassing solution that supports, deciphers, and revolutionises your workspace, creating a healthier, more sustainable setting that enriches the student and employee experience.

Our dedication to innovation, precise environmental insights, and adherence to ESG standards equips your organisation to navigate the challenges of today and foresee those of tomorrow, ensuring every space contributes positively to the well-being of your campus users and the planet.

SCAN TO FIND OUT MORE
ABOUT askUMA

POLAR

ABOUT POLAR

POLAR is the UK's premier distributor of Workplace Technology solutions.

Founded in 1969, POLAR offers a comprehensive range of products, services and support that help organisations increase productivity whilst reducing costs.

For room control, the new Muse platform from AMX will change how the integrated control of equipment, rooms and buildings is achieved through its multiple programming interfaces, including the no-code option, Node Red.

UMA Vision's Workplace Management Platform incorporates elements into a single solution that previously may have required two or more different platforms to achieve, integrating AV and smart building management with a set of tools to make your workspaces perform at their best.

AtlasIED have a range of audio solutions that provide privacy in open spaces, distribute different sources of audio to different spaces from a single controller and, should there be an emergency, provide mass communication, with lockdown or evacuation instructions that can be activated in many different ways.

T1V's ThinkHub is a visual collaboration solution that delivers the power of visual thinking with contextual information for a variety of in-room or hybrid settings, including Entrepreneurial Learning. Multiple people, in multiple places, can work simultaneously with multiple pieces of visual content with an equity of participation, wherever they are located.

Based in Burgess Hill, West Sussex, POLAR exclusively represents AMX, AtlasIED, T1V and askUMA, along with many additional audio, visual and workplace technology companies in the UK and Ireland, working directly with the approved specialist integrators who supply and support their customers with these solutions.

CONTACT

To find out more about UMA Vision and its implementation, please contact Peter Curtis at POLAR, askUMA's UK Distribution partner, using the details below.

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