

AUDE

Together, for excellent university estates & facilities

ASSOCIATION OF UNIVERSITY DIRECTORS OF ESTATES

Executive Summary of the Higher Education Estates Management Report

Summary, insights and analysis of the
2021/22 academic year

Image:
University of East Anglia



2023

For many directors of estates and facilities, the academic year running from August 2021 to July 2022, reflected in this year's AUDE Estates Management Report (EMR), was a year dominated by energy price rises. Even as the Covid pandemic continued to affect both short-term activity and long-term planning, it was two spikes in energy prices in Autumn 2021 and Winter/Spring 2022 that perhaps caused greater concern.

The overall sector spend on energy during this period rose from £400m to £574m – a pretty shocking uplift of 43%.

Depending on their specific arrangements, universities were more or less affected by this increase in costs. Some have successfully hedged against the worst of it while others have experienced a doubling or more in the amount spent on energy.

Image:
Students in the Enterprise Hub
University of Hertfordshire





Price rises have given extra impetus to a range of developments and planning activities that aim to help universities through any future price shock. The invasion of Ukraine in February 2022 is a significant part of the story. Increasingly, war or no war, we are in a global market for energy. Cold winters in China, Korea or Japan make a difference to global supply and global costs as these countries and others compete to buy energy in the same market as the UK, and at the same time. With net zero carbon targets now at the forefront of directors' minds, we see universities piecing together a wide range of activities that will help them deal with energy price fluctuations, their carbon footprint, or both. For the extended article in 2021/22 report, 'Rising to the net zero challenge', AUDE spoke to universities about the range of issues they're addressing. What are we doing now to help us get to net zero carbon? For some, there is enabling work to do, and they initially adopt a 'housekeeping' approach to their estate to ensure there is no throwing good money after bad. They fix draughty windows as an essential precursor to a more significant building fabric intervention planned for later. This approach must be sensible.

Energy managers examine issues large and small, working with suppliers to ensure the clearest thinking and the most technologically advanced products, not least when considering scope 3 carbon emissions within the supply chain. Universities consider their energy use and how to reduce it. They look at renewables and options for generating their own energy from solar, heat pumps or local solutions with other major players in the area. They look across the public and private sectors for the innovation or the plan that will make sense in their specific context.

While the cost of energy continues to be a major focus, it is the carbon reduction challenge that we increasingly see as the biggest test. The first university heading towards its 'NZC date' has a target that is now just five years away. AUDE, in partnership with BUFDG, EAUC and others, and with support from the Department for Education, has this year launched The Cost of Net Zero report and its accompanying carbon cost calculator tool. Please use them. They give the best and most consistent method yet of calculating the cost to each university of getting to net zero carbon.

Image:
National Manufacturing Institute Scotland
Upper floor collaboratory space
University of Strathclyde
Copyright HLM Architects / David Barbour Photography

The very approximate bill is estimated at a frightening c£40bn for the entire Higher Education (HE) estate. But until we know the likely cost in our own organisations, how can we set about budgeting, securing investment funding or prioritising to focus activity in a way that addresses quick wins and plans for the truly big-ticket items? The scale of the challenge requires a 'whole university' as well as a 'whole sector' approach. While it may be estates and facilities teams, for instance, that ensure EV charging apparatus is fit for purpose and effective, it is often others who look at organisational travel policies. A shared understanding of the likely overall institutional cost of net zero brings with it a need for a shared understanding of the degree of cooperative problem solving that will be needed. The same people who lead on capital development are unlikely to be the ones who lead on culture change or on changes to the curriculum or student engagement. The convening power and the impetus for coordination must now come from VCs and Councils/Boards to get everyone acting together effectively.

While the issue around reinforced autoclaved aerated concrete (RAAC) has arisen outside the timeline of this report, it would be remiss of us not to comment given the importance of the subject to many universities. (At least a sixth of AUDE member universities reported RAAC on campus in AUDE research carried out in September 2023.)

In 2021/22, 77% of the overall HE estate is in condition A or B. (The figure was just 65% twenty years ago.) We do note a small but concerning increase in the number of buildings in condition C or D. The long term improvement in condition ratings has taken considerable investment in new or refurbished buildings as well as in proper planned maintenance of the existing estate. Constant attention is required to ensure improvement in quality can be sustained. Maintenance spend is never the thing universities are keen to prioritise, certainly not in times of real financial squeeze, and estates and facilities teams are often under pressure to cut maintenance budgets. Failure to maintain buildings in a timely manner always leads to bigger issues. Without proper maintenance, the condition of the HE estate will decline.





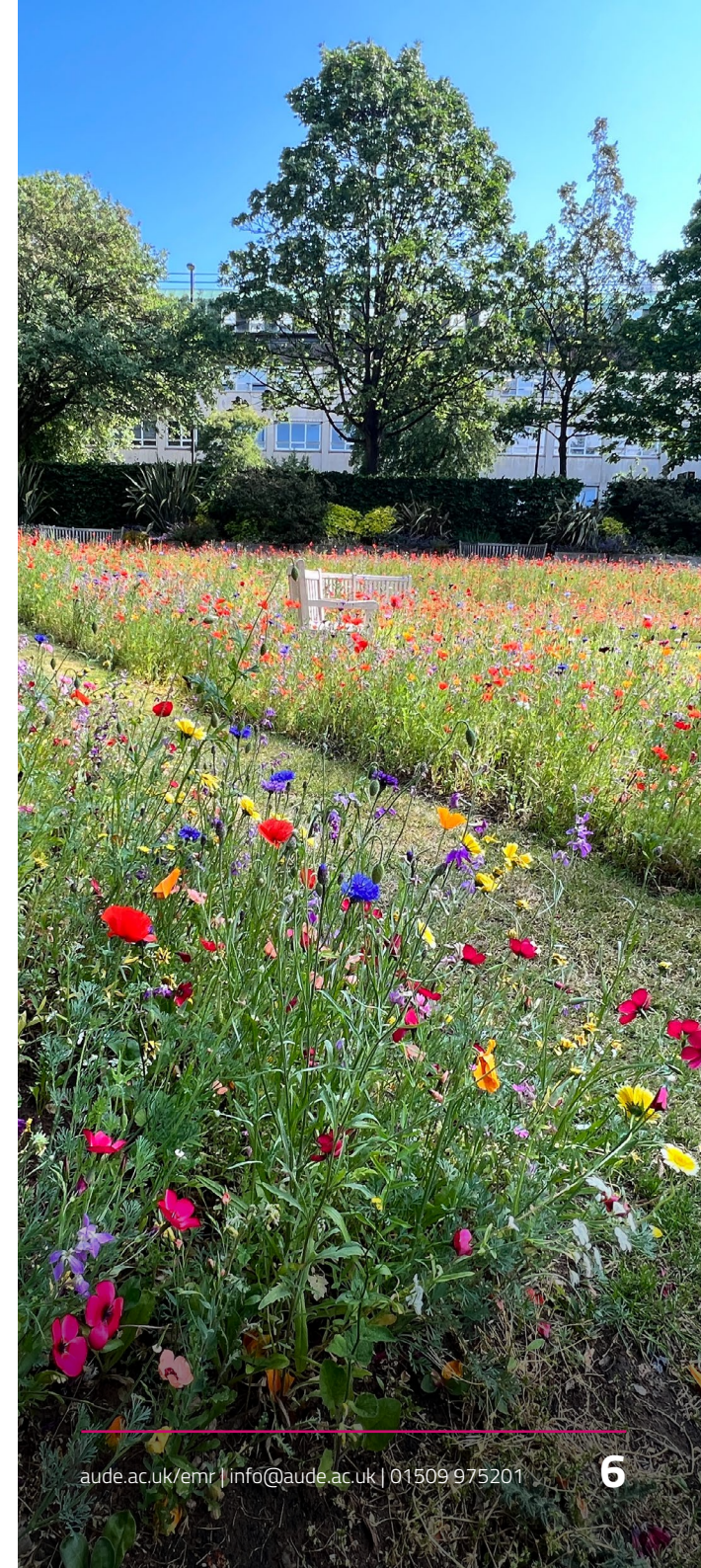
While RAAC has currently huge potential for disruption and financial impact, guidance from The Institution of Structural Engineers (reaffirmed as the best available guidance by both the Department for Education and Scottish government in September 2023) tells us that it can sometimes be managed with appropriate checks, although every institution will need to carefully assess the associated risks.

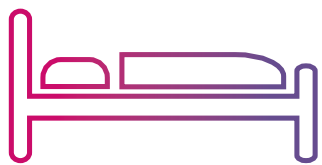
In 2021/22 we see a reduction in capital expenditure across the entire HE estate to £2.5bn and compare this to a previous high of £3.5bn immediately before the pandemic. Academic year 2021/22 is the second year of Covid, and the budgeting period for this year perhaps represents a point of maximum uncertainty, including the potential for continued its disruption. Given the extraordinary and worldwide nature of the threat, affecting everything from staff wellbeing and the logistics of materials supply to the willingness of international students to enter the UK, such a drop-off in spend should not be surprising.

Inflation has, of course, fed into these calculations. BCIS Inflation indices from Q3 21 to Q3 22 indicate a 9.44% rise in prices over this period. While some projects have been cancelled, many have been delayed or respecified. In a world where hybrid or remote working is an attractive option, many universities are rethinking their expectations around built spaces. Do we have more space than we need? Are there potential carbon (and cost) savings associated with reducing the estate? The potential for work patterns to swing back towards on-campus working can't be ignored so decisions with long-term capacity consequences will have to be carefully considered. The impact of the pandemic continues to ripple out and affect the decisions we make, and the question of 'right-sizing' is one that AUDE members will be thinking about long into the future.

The picture is also one of resilience in the face of challenge. The worst of these financial blows are somewhat cushioned in the data by a small increase in student numbers. Demographic data suggests that the number of UK 18-year-olds is on an upwards trend through to 2028, although it is interesting to note that in 2023/24, despite this demographic increase, the number of students applying to HE has reduced. Overall income growth is healthy, ranging from 4.7% (up by £181m to £4bn) in Research Intensive institutions to 9.6% (up by £253m to £2.9bn) in Small Teaching institutions. In simple cash terms, the increase in income of more than £1.3bn to £17.8bn (a growth of 8.2%) in our Large Research institutions is hugely impactful.

AUDE has continued to advocate for member universities in England and Northern Ireland to make an annual data return because we believe that a national data picture is invaluable. In Scotland and Wales it remains mandatory to make that annual data return. While Jisc leads a review of the sector's data needs in light of the fact that the return is no longer mandatory, AUDE will as part of that process, reluctantly argue for a leaner data set, representing around 20% of the current requirement, but of course there are many stakeholders in this discussion. We expect the results of Jisc's review to lead to change by 2025. In the meantime, we hold our position: when it comes to the next round of data collection, please submit as full a return as you can. No time is the right time for the sector to lose its ability to identify key trends, and we all understand the criticality of EMR data in benchmarking and assessing the performance of all aspects of the HE estate.





Residential income
increased from

£1,164m (20/21)
to
£1,740m (21/22)



Catering income
increased from

£101m (20/21)
to
£264m (21/22)



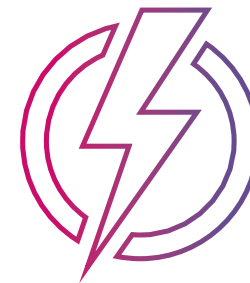
Academic capital
expenditure fell from

£2,696m (20/21)
to
£2,466m (21/22)



Repairs and maintenance total
expenditure increased from

£673m (20/21)
to
£762m (21/22)



Energy expenditure
increased from

£404m (20/21)
to
£582m (21/21)

Image:
STEAMhouse Building Meeting Spaces
Birmingham City University

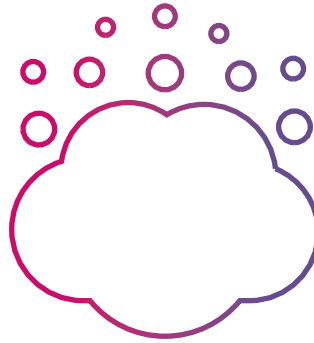


Teaching income up from

£23,970m (20/21)
to
£25,819m (21/22)

Research income up from

£8,591m (20/21)
to
£9,078m (21/22)

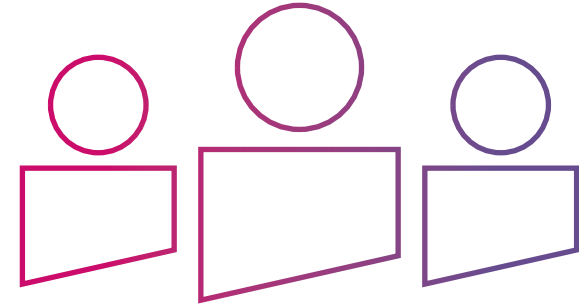


Carbon emissions fell from

1,202 (20/21)
thousand tonnes
CO₂
to
1,174 (21/22)
thousand tonnes
CO₂

Carbon emissions/m² up from

55.2 (20/21)
kg CO₂/m² GIA
to
55.9 (21/22)
kg CO₂/m² GIA



Student numbers by segment

Large research

595,600 (20/21)
to
621,500 (21/22)

Research intensive

165,800 (20/21)
to
165,400 (21/22)

Large teaching

778,100 (20/21)
to
784,000 (21/22)

Small teaching

223,200 (20/21)
to
230,700 (21/22)



Estate size (GIA) up from

21,793,000 m² (20/21)

to

22,196,000 m² (21/22)

an increase of

403,000 m²



Capital expenditure for the residential estate fell from

£161m (20/21)

to

£187m (21/22)



Repairs and maintenance account for

31.3%

of total property costs

£762m pa



Energy accounts for

23.9%

of total property costs

£582m pa



Cleaning accounts for

8.3%

of total property costs

£293m pa



Security accounts for

12.0%

of total property costs

£202m pa



Students living in University halls up from

335,300 (20/21)
to
348,000 (21/22)



Students living in their own/parents home up from

848,000 (20/21)
to
849,400 (21/22)



Home UG students living at their/parents home up from

588,700 (20/21)
to
608,900 (21/22)

Image:
Forum Theatre
University of Hertfordshire



Image:
Campus Halls
Arts University Bournemouth

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