





Energy Webinar 12 April 2022

Q & A

Umesh Desai, Director of Estates & Facilities, De Montford University

Q. 19 Degrees might require discussion with health and safety department. In Scotland you might get away with it but on the south coast of England we have no chance.

A. I would suggest that pre-covid this would have been a bigger issue. The 19 degree set point would have been an average and some parts of the building/office/teaching space would have been lower than 19 degrees and you would have got complaints. At my university I had to raise this to 21 degrees to ensure virtually all habitable areas (excl corridors etc), achieved 19 degrees.

However, post-covid I believe some universities could get away with lowering the set point to 19 degrees as many staff and students would be expected to wear appropriate clothing knowing that the fresh air ventilation will be on, or windows will be kept open all year round.

Q. Are there any sector wide statistics which rank which departments or schools tend to use the most gas and electricity? If so, I'm interested in where STEMed and Laboratories would sit in this ranking.

Unfortunately, the currently available data does not break down into that level of granularity. You can have a deeper dive into the HESA data by using HEIDI-plus, https://www.hesa.ac.uk/services/heidi-plus

Q. How do you reduce the size of your estate?

A. The simplest way would be to mothball buildings, I believe the jury is still out in terms of the long-term impact of hybrid working and online teaching. Universities and many students will want to return back to face-to-face teaching for the whole experience. Although I believe some form of hybrid working for staff is here to stay, again time will tell if the balance of how many days you work in the office and how many from home is to remain as the split during the pandemic, or whether there will be a push to attend campus three or four days a week.

Clearly selling or leasing buildings is another obvious option, but this needs careful consideration as once you have sold a building you won't get it back, if in five years things change. The other issue will be whether there is anyone out there who will buy the buildings for the value placed by the university, particularly office type buildings as there is an over-supply at the moment.

Repurposing of buildings from office to teaching, instead of building new or extending is the other main approach to effectively reduce the size of the estate, (ie by not building more).

Steve Creighton, Head of Member Services, TEC

Q. What is the justification for cost reduction between W22 and S23? Is it due to reduced demand or have other assumptions been made around factors that influence the market?

A. A wide range of supply and demand fundamentals determine price with the nearer term more impacted by 'actual' fundamentals rather than 'sentiment' in longer dated periods. Current differential between W22 and S23 is £50MW/50p/th. The market is in backwardation as future prices are lower than spot prices. A normal market is the other way around with future prices being higher than spot.

Q. How does PPA actually help if the main reporting method is via HESA? What are other institutions doing to report carbon emissions

A. PPA is from a dedicated renewable generation asset, so provenance is guaranteed. The REGO is bundled with the generation as proof that it is 100% renewable energy. The question on 'what are other institutions doing to report carbon emissions?' wasn't, and couldn't be answered, as the panel does not have this information. There was a response from a participant where HESA confirmed that 'If the REGO has been retired, this energy can be included in the 'total renewable energy generated onsite or offsite' field when completing your return.' We will seek further clarification on this, as should any institution submitting returns.

Q. Steve mentioned that this winter was mild - so demand was low - should that not mean less price increase?

A. In normal times yes, but we are in new market territory and global pricing has never been this high for the reasons touched on. In short, if winter had been cold pricing would have been a lot worse

Sally Pidgeon, Deputy Head of Sustainability, University of Cambridge

Q. In the Carbon Usage slide, what's the difference between Gas and Heat & Steam?

The University occupies some buildings at the Cambridge Biomedical Campus, which are supplied with heat and steam by the NHS Trust via a site wide system. The heat and steam is used for heating purposes and also supports some research applications in those buildings. Most University buildings on the rest of the estate are heated via gas.

Q. How is your University working with Procurement to achieve Net Carbon Zero in their Supply Chain?

A. Sustainable procurement is integral to the University's sustainability commitments.

The University is undertaking a strategic project to transform how it procures its goods, works and services. The project aims to support sustainably informed purchasing choices, whilst maximising the potential of sustainable procurement to help secure a zero-carbon future. This involves learning from other HE institutions that are leading in this field; a commitment to obtain the international standard in sustainable procurement, ISO20400, to ensure sustainability is integrated within procurement, and related decisions and processes; and developing a long-term, University-wide sustainable procurement strategy as well as proactive guidance on integrating sustainable procurement into buying activities.

The University appointed its first Head of Sustainable Procurement, as part of Central Procurement Services, last year, who is leading on this work, in close collaboration with the Sustainability Team. The Sustainability Team are also taking forward work to develop Science Based Targets (SBTs) for the University's scope 3 emissions, and one of these will relate specifically to the supply chain.

Q. Are you planning to reduce estate size by 1% a year or this just an illustration?

A. The 1% figure was for illustration only.

However, the University has, post Covid, established a working group to look at options for managing the estate to ensure it supports the changing needs of the University and allows us to create high quality, affordable and

environmentally sustainable spaces. Reimaging the size and shape of the estate, in part to support carbon reduction, is part of the brief for this work.

- Q. What scenario is your SBT based on? Is it 1.5 degrees or 2?
- A. 1.5 degrees. Please see https://www.environment.admin.cam.ac.uk/science-based-targets-0
- Q. You said you were aiming to produce 90% of electricity. How will this be managed to ensure it's useful production at the right time?

A. I said during my presentation that the proposed solar farm will produce around 19% of our electricity (based on 2019 consumption levels). I think perhaps this question is based on a misunderstanding/ mishearing of what I said?

We are intending to develop further onsite renewables and very much recognise that batteries and smart technology will need to play an important role in helping us to produce as much renewable electricity as possible, and to use it fully and efficiently. We recognise we may need to work with other local partners/ parties to achieve this. We are only starting to look into this, initially looking at the current capacity of the local grid and what opportunities and barriers might arise from that.

Q. Is there any insight about relevant Government Grants and links ie. like the SALIX Government funding (now stopped in March)?

https://www.gov.uk/government/publications/green-heat-network-fund-ghnf