

Date: Wednesday 23rd September 2020

Time: 10:00–12:00
Resources: Available here

MINUTES: Energy & Water Management Topic Support Network Meeting

Attendees:

Alasdair Macleod Lews Castle College UHI

Andrew Wholley Mott MacDonald

Andy Anderson Advanced Procurement for Universities and Colleges

Colin McLaren Edinburgh College

David Jack The University of Edinburgh

Derek Mitchell University of Dundee

Fergal McCauley City of Glasgow College
Gilbert Valentine University of Stirling

Gordon Heggie University of the West of Scotland

Leslie Paterson City of Glasgow College Stefan Jindra University of Aberdeen

Apologies:

Chris Larkins Heriot-Watt University

SUMMARY OF DISCUSSIONS	ACTIONS
Welcome, Apologies and Introductions Andy Anderson, Co-Convener, APUC	
Everyone was welcomed to the event and introduced.	
	Welcome, Apologies and Introductions Andy Anderson, Co-Convener, APUC



2 Campus of the Future Green Gown Award Winning Project

Dr Gordon Heggie, Senior Lecturer, University of the West of Scotland

UWS Hamilton Campus (originally Bell College building) was inefficient and an outdated learning environment. Aimed to replace it with an environment that was really future facing and adaptive.

Went through an options appraisal and decided on adaptive reuse at Hamilton International Park. Decision was significantly informed by the views of students & staff and there was an ambition to create a carbon neutral campus.

It was repurposing an existing building which was initially designed as office accommodation in 2012 but never occupied. More sustainable than a new build.

Really flexible space that can change and adapt to continually meet the needs of changing learning.

Opened Sept 2018: £110 million investment, 4,100 students, 208 staff & 26,000 m² of flexible space.

Vision of agile learning where every space can be seen as a learning area. There are no offices – all staff are co-located in one of the buildings.

Moved away from traditional lecture spaces to more fluid open plan spaces with integrated innovative technology. Spaces are very flexible to adapt to different needs – including semi-enclosed environments, retractable walls & break-out spaces.

VC solutions to link up spaces, smart lighting systems, lots of charging outlets for students & group work pods.

Very much about allowing the staff & students to work in a space that meets their needs and inspires student success.

All energy provided by renewable energy from Blantyre Wind Farm through Power Purchase Agreement (PPA).

- Impressive EPC rating
- Efficient heating & lighting
- Building management system allows a high level of control we have reduced the lighting by 60%
- Rain water harvesting meets 80% of needs
- Fleet of EVs and charging points
- Secure cycle compound
- First bus launched 2 new services to site

Our most important users are the students and we are doing post-occupation evaluation with them.



They find the space welcoming and unintimidating so there is a sense of shared ownership. Staff were resistant to open areas but students were comfortable straight away and felt it better prepared them for the workplace. Bean bags & hammocks are also very popular with students.

Questions

Did staff make any change requests after moving in?

Mostly minor (strength of lighting etc) we decided to not make any large changes in the first 2 years and staff have generally adapted very well.

Is the electricity from the wind farm a direct link?

The wind farm is very close but AA thinks it is a PPA rather than a direct link.

How did it fit in with the National Electricity Contract?

It is separate as was agreed as part of the lease of the building

Do people have any paper storage?

The initial vision was full agile working but we decided to give staff a fixed point with 2m² of storage. We also created communal bookshelves but these haven't been used.

Reflections on Improvements to the Design & Construction Stage of the Recent NPD College Projects

Fergal McCauley, Head of Facilities Management & Les Paterson, Head of Estates Management, City of Glasgow College

Project Overview

City of Glasgow College was created in 2010 through the merger of Central College Glasgow, Glasgow College of Nautical Studies and Glasgow Metropolitan College. The estates comprised of 11 buildings of varying condition and lacked flexibility in delivering the curriculum. The project was to condense to 2 buildings totalling 68000m² and was procured using the Non Profit Distributing (NPD) model. NPD was developed to replace the traditional Private Finance Initiative (PFI) model and as an alternative funding source to allow major infrastructure projects to be built.

- City of Glasgow College £223m
- Ayrshire College £50m
- Inverness College £50m

NPD is no longer in use but if you are looking for capital funding there is a new option called MIM – Welsh Model <u>further info here</u>.



Dialogue with preferred bidders

- Ensure right people are involved get what you ask for no comeback later
- Time is of essence you can't spend too much time reviewing if you miss something, it could have consequences for 25 years
- Only looking to establish if Contractors Proposals (CPs) meet College Requirements (CRs) – can't comment on quality, it either complies or it doesn't

Liaison with Stakeholders

- Design team met all stakeholders and produced the following data sheets architectural, ICT, room layout and migration
- Important that stakeholders fully understand space and requirements, and have consulted their staff

Migration

- Decant accommodation
- Group 3 equipment college owned was moved to new building
- Paper and equipment reduction 2 shelves and 1 locker issued to all Staff
- Moving of sensitive material legal documents, passports, etc
- Moved 1400 Staff to new buildings.

Handover and Soft Landings

- Classroom of the future
- Site visits for all Staff several months before handover
- Training and equipment
- Handover Date too early no going back as migration process emptied spaces in legacy buildings ready for new entry
- Building User Guide
- Soft landings went well. Staff welcome packs, escorted into building, setup at desk with cupboards and lockers issued

Contract Management

- You still need the staff you have now as contract management is onerous
- Partnership approach
- Paymech
- PPM and Lifecycle

Utilities

 Renewable technologies – solar PV, solar thermal, CHP and rainwater harvesting



- CHP biodiesel selected inefficient and expensive to run shutdown
- Joint Utilities Working Group
- Contract should have been setup in a way that put more onus on FM
 Contractor to ensure efficiencies in terms of utility consumption.

Summary

- Buildings certainly much better than legacy buildings
- Ensure design and operational stages are well resourced. You will most likely need additional professional staff
- Spend time on soft landings
- Building User Guide and O&M Manuals ensure these are delivered on time
- Utilities obviously cheaper price via Procurement Scotland, however, mechanism to penalise FM Contractor for inefficiencies should be considered

Questions

CHP Biodiesel was it shut down because of cost or supply issues?

Yes supply volume was an issue, it was very expensive and didn't deliver a significant carbon saving. Also no VAT relief from HMRC as not recognised as a heating fuel.

There is an issue with FM providers not focusing on energy conservation. How easy has it been to have energy conservation measures accepted by the FM provider?

They are generally quite open. We meet with them regularly to review.

4 NDEE Framework & Support Unit

Andrew Wholley, Associate, Mott MacDonald

- Two Frameworks; under £1m, over £1m
- Energy Performance Contract (EnPC) Frameworks
- Open to complete Public and Third Sector, with focus on FE and HE opportunities
- Efficiency first approach to projects (lean, clean, green)
- Supporting institutions to meet and exceed carbon reduction targets
- Latest Frameworks of Contractors live until March 2024

5 contractors for projects under £1m and 11 contractors for projects over £1m

2016-20 projects £25million across 180 buildings



Whole building approach to energy efficiency – trying to get a business case that looks holistically across the estate for retrofit options to help deliver projects with longer paybacks

Benefits of EnPC

- Payment is linked to guaranteed savings
- Specialist contractors
- Standardised processes & documentation
- Funded project support
- Wide funding opportunities (SFC, Salix, third party finance)

Project Support Unit

- Project Management, Technical and Procurement Advisory Support
- Grant funded by Scottish Government up to £50,000 per project

Colleges Energy Efficiency Pathfinder (CEEP)

- SFC Capital stimulus funded project for Colleges (Borders, Edinburgh, Newbattle Abbey & West Lothian College)
- £3.2m investment
- £350K savings / annum
- 1500 tCO₂ / annum

Low Carbon Heat Challenges

Struggle to get a financial case for heat pumps so need to look at whole building to use fabric & lighting upgrades to help deliver on heat.

Also looking at partner approach through the new framework.

Any further questions to NDEESupportUnit@mottmac.com

5 EAUC Update

Jill Burnett, Carbon & Estates Project Officer, EAUC-Scotland

- <u>Sustainable Procurement Topic Support Network 8th Oct</u>
- Waste Management Topic Support Network 22nd Oct
- Public Bodies Climate Change Duties reporting peer review 12th Nov email <u>Scotland@eauc.org.uk</u> if you would like to attend

6 AOCB



7	Next meeting ideas	
	Please e-mail any suggestions for topics or speakers at our next meeting to jburnett@eauc.org.uk .	
8	Thanks and close	