



**MINUTES OF THE CBCA MEETING**  
**ON THURSDAY 18<sup>th</sup> JANUARY 2024**  
**HELD ONLINE**

\_Date circulated: 04/03/2024

**PRESENT**

Michael Ainley		Frenger Systems Ltd
Andrew Gaskell	Chairman	Frenger Systems Ltd
Alan Green		Trox UK Ltd
Mike Gosling		Trox UK Ltd
Daniel Jones		Swegon Ltd
Chris Yates	Secretary	FETA

**1. Welcome**

The Chairman welcomed attendees and all those present introduced themselves.

**2. FETA Competition Guidelines**

The Competition Law Guidelines were noted and joining the call or attending in person was taken as acceptance of them accordingly.

**3. Apologies**

Apologies were noted from Chris Jones of Flakt Group.

**4. Minutes of 12<sup>th</sup> September 2023 meeting**

The previous minutes were agreed by the meeting and CY authorised to sign them on behalf of the chair. Dates changes were noted which have now been done.

**5. Actions Arising from the minutes not covered under the agenda**

All members of the CBCA have been contacted who are not selling Chilled beams and ceilings and advise they will be taken off the list unless they can demonstrate otherwise - Done.

CY has added Dan Jones to the Air Distribution list and taken Waterloo off the CBCA and other lists.

**6. Membership**

No changes to membership.

## 7. Life Cycle Costings

### TM65

C/F from 15/3/23 - CY mentioned that LG were happy to host a meeting/training session on using heat pumps with fan coils and possibly chilled beams and ceiling. To be progressed by CY. The Fan Coil group have been working on this as well through Daikin.

**Action CY**

Kieran O'Brian at CIBSE had been in discussion with Daniel Jones. CIBSE looking to have TM65 3rd party verified. There is a provider but looks to be expensive, cost similar to EPD and therefore better to go for EPD. Mike Gosling felt we needed to try and get into discussion with CIBSE. Elementa were collecting data from manufacturers, so they have a repository. Carl Collins at CIBSE has confirmed that they are getting the data.

Chris Yates to set up meeting with Carl Collins to do a Q and A webinar and decide on format once we have responses from contacts. CY and DJ to confer.

**Action CY**

Daniel Jones advised that Swegon have supplied data and are due a report back from Elementa. CBCS to be advised when update received.

**Action DJ**

Andrew Gaskell felt that the TM65 forms are a good start with section A and even better when manufacturers complete sections B and C, although and rightly so it is problematic for those manufacturers who source materials and/or components from China who would have issues completing sections B & C. Chris Yates advised that BSRIA were going to be running a seminar on embodied carbon and would provide details to the group once received.

**Action CY**

### SPONS

The meeting discussed SPONS ahead of Chris Bicknell joining the meeting at 11:30. Michael Ainley asked for details of the current chilled beam costing in SPONS as these may differ from the ratified figures previously issued to SPONS. Andrew Gaskell's view was it is likely that material costs would be the biggest change which could be added to the original costs.

Mike Gosling informed the meeting that data collection on statistics was being attempted through the ADMG. Chilled Beams could be done through FETA as well. BSRIA overview was issued in November but excluded chilled beams. Michael Ainley informed the meeting that Dave Garwood was collecting 2022 data. It is the same numbers as ADMG so do the CBCA want to contribute to FETA. Swegon would support. Frenger do a lot with BSRIA already and will come back to CY.

Chris Yates advised that Paul Reeve, Ex ECA would be available for a project on embodied carbon from Q2 2024.

Meeting discussed what it would need to look at.

- ability to translate it for a technology to "why chilled Beams?
- energy consumption
- new or pre existing plant
- Impact of chilled beams on net-zero
- Operational savings are not being mapped
- EPD savings from a chiller
- Increase energy efficiency across multiple technologies
- While life cycle cost of the building

At this point Chris Bicknell of AECOM joined the meeting at 11:30. He works in Building Performance Group and Life Cycle costing lead. Department has a mix of Building Engineers & FMS, aggregating information and working with PFI funds. They are looks at SPONS and developing data and keeping it current is major activity. Objective is to achieve the best design performance for the building. Challenged BSRIA Blue Book as inaccurate data. Looking to achieve active assessment of point of failure. Raised a concern over fan coils lasting 25 years as this was more like Trigger's broom. Mike Gosling advised that Trox in the UK are selling chilled beans, air handling and fan coils and are using TM65 data.

CB advised that lifecycle costing throws up challenges with timber versus concrete. Performance is one aspect but also understanding the whole project is extremely important. Cash is king and carbon is queen as Paul Morrell had stated. Large estates are using embodied carbon including relative, operational and total carbon.

Dan Jones advised that Dave Cheshire could be a good contact to look at whole life carbon. Could do a webinar on the subject from a HEVAC perspective.

Embodied carbon could go into BIM at some point. Costs are going in currently and AECOM may publish rate libraries.

Michael Ainley advised that whole life cycle costings have been on the CBCA action point 7 for more than 10 years and still not resolved. Action point 7 was passed over from previous CBCA member company to Frenger in an effort for Frenger to write an action plan of how to break the amount of work in this difficult task to be shared amongst suitable member companies. Michael Ainley issued a proposal to Chris Yates on the 22 March 2023 on the understanding that it would only be issued to those participating in the meeting and that would be actioned with some of the proportional workload.

CB advised that we need to consider how long do the components last and how much do they cost.

Michael Ainley asked CB if they had any historical data of appraisals of Chilled Beams and Fancoils as suitable products for the same project, so we can see how they compare. CB said yes there had been comparisons and that he may be able to forward some tabular results of how they compared.

AECOM do not do whole life cycle costing due to the difficulty obtaining some whole life cycle data related to the total cost to business such as access to HR records etc.

CY to email CB regarding embodied carbon and what the CBCA can supply.

#### **Action CY**

CB advised that they were undertaking a research project into chilled beams but no more details at this stage but likely to include components, economic service life and maintenance. Michael Ainley suggested that the type of application would determine the best type of chilled beam suitable for the project e.g hospitals need drop down heat exchanger coil to enable cleaning to all four sides, which CB recognised.

Chris Bicknell left meeting at 12:08. CBCA members felt that the meeting went very well. The meeting discussed some of the background as to why chilled beams were not figuring more prominently.

### **8. Building Regulations, Certification and Standards**

#### **Building Regulations**

Alan Green advised that Part 2 was now out for public consultation but only Part F for domestic. He will send out a summary.

Maximum SRP - numbers are the same but introduced a totally different calculation. CJY to check that what has happened on Part 2 non-domestic but does not think it is being consulted on – confirmed.

Alan Green advised that Part L and F hardly mention chilled beams.

Chris Yates to contact Peter Rankin and Jack Hulme for a meeting over the lack of information on chilled beams and how do we ensure chilled beams are featured to ensure they are not lost from legislation.

#### **Action CY**

### **9. Marketing of Chilled Beams & Ceilings**

C/F - Future subjects for press coverage:

- Embodied carbon with CIBSE – joint promotion
- How good chilled beams are for health. Health care applications need to be on the list.

#### **Action CY**

### **10. SBEM**

CY had confirmed that SBEM is being updated in the Future homes & Buildings Standard consultation. Historically SBEM did not feature Free Cooling chillers which need to be added as they have considerable energy saving as using elevated water temperatures when used with chilled beams.

Chris Yates to facilitate CBCA participation when SBEM is being updated in the Future homes & Building Standard.

**Action CY**

**11. Energy Technology List (ETL)**

Calum Knox of Riccardo and David Fordham of BRE had run the webinars which Andrew Gaskell and Mike Gosling had attended. View was that it a marketing tool now so no real value.

Riccardo are doing an independent report on fan coils versus chilled beams based on the recorded discussions at the time, in which it was discussed that it can commonly be that Fan Coil Units have higher SFP values than that used in the initial EPC design, due to resistance from ductwork and grilles.

**12. NHS Health Technical Memorandum**

Chris Yates explained that there might be a funding option to support the review of the Technical guides. CY to write to HEVAC members.

**Action CY**

**13. AOB**

CY advised that FETA was engaged in political advocacy on the upcoming UK F-Gas Regulation and would be setting up a HEVAC F-Gas/PFAS group.

**14. 2024 meetings**

Wednesday 15<sup>th</sup> May – Face to Face at Hare Hatch  
Thursday 19<sup>th</sup> September - Hybrid

Chairman: .....

Date: .....