

# The Energy Debate

The Trinity Centre, Cambridge

29 March 2006

## 1. Present

David Clarke	CDIS-KARM	DC
Calton Clarke	CDIS-KARM	CC
Janette Hewitt-Allard	CDIS-KARM	JHA
Kerry Burnett	CDIS-KARM	KB
Colin Nevitt	Falcon Foodservice Equipment	CN
Vim Hariani	Foster Refrigerator	VH
Steve Holland	Foster Refrigerator	SH
Chris Playford	Foster Refrigerator	CP
Phil Gibson	Halton Vent Master	PG
John Eaton	Hobart	JE
David Riley	Hobart	DR
David Ramscar	Installation Design Services	DRa
Chris Hinton	Shine Food Machinery Ltd	CH
Kevan Sinclair	Shine Food Machinery Ltd	KS
Mick Jary	Williams Refrigeration	MJ

## 2. Introduction

KB welcomed everyone to the meeting and thanked them for their time and was pleased to note that everyone invited had been able to attend. KB briefly outlined the agenda and aspirations for the day but explained that the agenda was for guidance only, that it was felt the bulk of the day would be as discussion in open forum. There would be one clear objective prior to closing the meeting and that would be to decide if it had been worthwhile and was worthy of further meetings.

## 3. DC gave an overview of how we had reached this point, starting with the request from The Caterer and Hotel keeper for an article on Design for efficiency. In researching this it had become apparent that there was a lot of good work being carried out by individual companies but there seemed to be a lack of a co-ordinated approach.

DC had been at meetings where BREEAM had been discussed with little attention, a year later at the same meeting BREEAM was a major issue – energy efficiency was becoming higher on the agenda.

There was a model used by MEP consultants to calculate energy efficiency, the catering environment needs to be able to provide its own calculations.

There could be a bench mark such as heat up power, idling power and usage power.

An example was cited with regard to the Wok cooker and how in the right environment it could be the most efficient item of equipment although on first inspection it would appear to be the worst.

Another example of usage of equipment to produce the end result depending on volume was given i.e. peas through a pressure steamer or microwave.

"Life Cycle" is not a cost issue it is about selecting the right equipment for the job.

Energy efficiency-Global Warming-Sustainable Energy are not the same but are interrelated.

We need to define an acceptable means of measurement.

#### 4. Open Forum

The meeting continued in open forum key comments etc. are noted below:-

CO<sup>2</sup> calculations are a requirement as defined in Part L of the Building Regulations.

There is an operational obligation in terms of Management and Maintenance.

Sainsbury's have witnessed a 60% increase in energy costs to circa £6m!

Operational staff need to be better trained as earlier as college in terms of use of equipment and power consumption.

Investigations have been made with regard to "Pan sensing Hobs" but with issues appertaining to warrantee and maintenance costs.

Any energy saving equipment or measures need to be easily used or they won't be.

There is already evidence that as part of tender requests questions are being asked with regard to energy efficiency in terms of equipment and factories.

The energy debate is here to stay and should be seen as a growth area with potential business opportunities.

There is a need to identify common information that can be used to aid evaluation of equipment.

The initial purchase cost of an item of equipment could be as low as 10% of its Life Cycle Cost.

In many cases the client hierarchy results in one person being responsible for the initial purchase but another responsible for the running costs, neither being willing to look at the "whole picture".

Energy per meal and CO<sup>2</sup> emissions should form part of the standard information issued on design drawings.

In order to arrive at a "Bench Mark" does there need to be a series of Client Templates, as one set of results may be best suited for one client scenario but a different scenario would require a different bench mark?

Should there be a Client's standard brief in terms of energy efficiency expectations etc?

Some major Clients are already taking to the challenge i.e. Whitbread who are testing individual equipment and conducting "energy" training.

Should there be a system of approval and certification issued to identify equipment reaching energy efficient levels?

Is there anything in the BREEAM system that could be used?

In 2004 there were many days when the temperature exceeded 28<sup>0</sup>C the trend is increasing resulting in more days when there will be issues.

MEP consultants are not up to date with catering but are being asked to make "life changing" decisions.

Catering designers are unable to prove their calculations.

CP gave a brief overview of the ECA scheme with regard to the refrigeration sector.

The Carbon Trust can provide funding for surveys and research by Universities to investigate and create "best in design" models.

To give teeth to this do we need the backing of a National Body?

Is the Facilities Management body worth contacting?

Do we need to aim at chefs whilst in training?

Are there areas where the human element can be removed i.e. sensors in ventilation that detects when cooking has stopped and therefore cuts off or goes on to reduced power?

Can the building slab be used for heating or cooling retention etc?

Can waste heat be reclaimed by heat pumps, not just on individual equipment but generally?

If there are ideas beyond the scope of the kitchen should RIBA be involved?

Are any of the energy type issues also H&S type issues as H&S tends to be one area where clients have the ability to address more readily?

Issues are far reaching e.g. water is now classed as a food product – there are concerns with regard to Legionella.

Should manufacturers have to declare the equipment history in terms of production and transport etc. to give a whole view approach to their efficiency i.e. cost in terms of energy and environment for shipping equipment in from China etc.

Are there standards in Europe that could be used here?

What are true maintenance costs?

## 5. Ambitions

Again this was an open forum debate, key comments noted:-

In terms of measurement it was felt that “threshold limits” rather than numeric values would be better.

A whole usage measurement needs to be defined i.e. 100 portions of chips or 2 portions of chips?

Are we trying to:-

- Advise clients on energy efficiency

- Tell manufactures what energy levels they need to achieve

- Create a guide

We should investigate software to easily and quickly complete energy consumption calculations.

In a High street environment the owner/operator will want to know their energy costs so why shouldn't large organisations either client or operator?

Systems and equipment should be researched with a view to take out the human element.

The market place is changing and energy efficiency, environment and sustainability are becoming more "main stream".

As a generalisation catering equipment is deemed to be 50% efficient.

The school sector is taking this seriously as energy costs could wipe out any government additional funding provided for the uplifting of school meals – Jamie Oliver.

PFI projects will also need to look more closely at energy costs as these could drastically reduce their expected returns.

We need to identify our target market place and clients.

Do any existing bodies have schemes that we could tap in to i.e. DEFRA?

Do we need a celebrity chef endorsement – Nigella was suggested!

## 6. Action Points

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| 6.1 | Contact to be made with ECA and The Carbon Trust | CN |
| 6.2 | Contact to be made with DEFRA                    | PG |
| 6.3 | Contact to be made with Whitbread                | MJ |
| 6.4 | Contact list to be issued                        | KB |
| 6.5 | Notes from this meeting to be issued             | KB |
| 6.6 | Sample energy "model" to be tabled               | DC |

## 7. Next Meeting

David Riley kindly offered to host the next meeting at their offices in Peterborough, to be held on Thursday 18<sup>th</sup> May 2006 10.00 for 10.30.