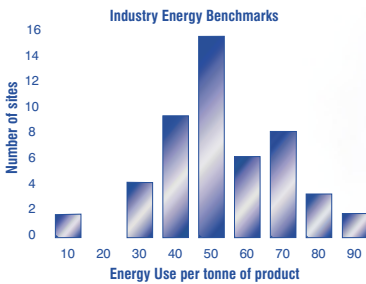


news

A Regular Newsletter for Companies in the UKASTA Climate Change Levy Discount Scheme

Feedback of Industry Performance

Each site has now submitted data to the Climate Change Levy Discount Scheme for at least 2 years of activity. You should have recently received a site report showing your progress and indicating how much more improvement needs to be made to meet the first milestone target. You will also have received some benchmark data showing a comparison of the performance of a number of similar sites. The benchmark graphs are similar in format to the one shown below. Hopefully you will find this a useful way of assessing how much scope you have for efficiency improvements. We have prepared separate graphs for electricity and heat usage to help you identify which energy type offers the best scope for savings.



REMINDER

CHP Evaluation

Don't forget that you should have completed a Stage 1 CHP evaluation for each site with a CCLA by the end of September, using the spreadsheet circulated in early August. Please return the evaluation report to us as soon as possible if you have not already done so. Contact the help line if you need another copy of the CHP evaluation spreadsheet.

The Climate Change Levy has now been in place for 6 months and hopefully you have begun to make and implement plans to achieve the first milestone target. The first milestone year is the 12 month period starting in October 2001 – so early action to make savings is essential! This newsletter will continue to provide practical ideas to help you identify ways of making energy efficiency improvements. Some of the topics covered in this edition include efficient use of steam and the development of a good monitoring and targeting system.

UK Emissions Trading Scheme (ETS)

You may have seen press announcements about the launch of the UK ETS. The ETS is a mechanism to enable any UK company to take part in CO₂ emissions trading. Whilst the ETS has some implications for companies with a CCLA, a primary objective of the ETS is to stimulate emission reductions from energy use that IS NOT eligible for a Levy discount.

The scheme is intended to provide a financial incentive for companies to voluntarily accept an absolute target for their carbon emissions. The £30M incentive is being distributed through a completely different and separate mechanism from the CCL discount. Monies will be allocated through an auction process – companies offering to make the most emission reduction will get the greatest share of the incentive. **Only CO₂ emissions from sources outside Climate Change Levy Agreements can be considered in the auction process.**

The ETS may still be of interest to companies with a CCLA for two reasons:

- a) If you have sufficient energy use that is not eligible for a Levy discount you may wish to consider entering the ETS for this part of your energy consumption.
- b) It will be possible for carbon credits to be traded between the ETS and CCLAs – subject to certain restrictions.

The full details of the ETS were published by DEFRA as this newsletter went to press – they can be downloaded from www.defra.gov.uk/environment/climatechange/07.htm.

Enviros will be preparing a new Information Sheet on the way the ETS will interact with CCLAs – this should be available on our CCLA website by mid October (www.ccleve.com).

New Information Available on our Website

We are producing new Information Sheets on important topics on a regular basis. These will be available on our CCLA website. There is new information on the website about:

- Enhanced Capital Allowances
- CHP Evaluation
- Training Courses

In the near future we will be producing Information Sheets on the following subjects and covering them in future newsletters:

- Emissions Trading
- Qualitative Requirements of your Agreement (Schedule 3)
- Product Mix / Output adjustments
- IPPC

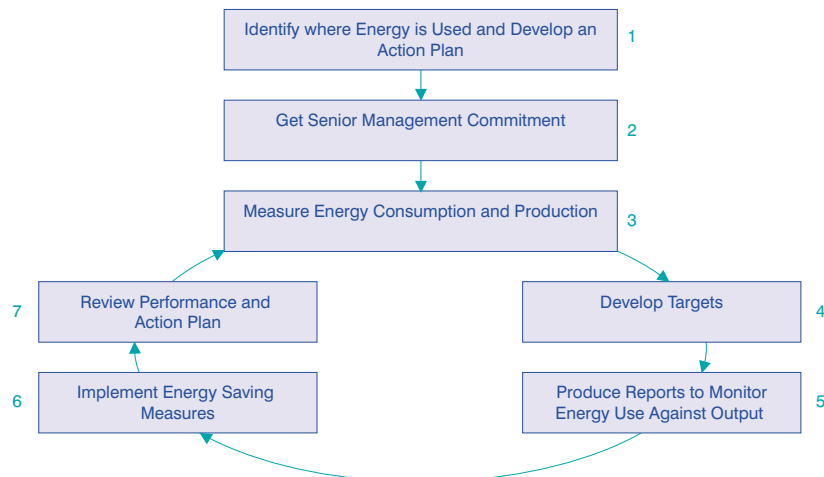
Old information sheets will also be updated. For example, Information Sheet 1 has been updated with the levy rates in p/kg for all solid fuels. We will be updating the website on a regular basis. As well as issuing new information sheets, we will also post the latest CCL news. There is an on-line booking form for training courses. Make sure you visit the site regularly to keep informed with the latest information.

Verifying Historical Data

The CCL administration team has been inundated with requests to modify data already submitted to the scheme. If you think that any data submitted to the scheme is wrong and needs modifying, please notify us in writing as soon as possible. If the changes affect your base year data, we will issue modified targets to reflect these changes. Please note that due to the high volume of requests, there is a large backlog to process.

Energy Management briefing

Setting Up an M&T System



In the first newsletter we introduced the significant benefits of using a comprehensive energy Monitoring and Targeting (M&T) system. A good M&T system can be the core element of a successful energy saving campaign, providing low cost energy savings and also providing the information required to support other initiatives. In this newsletter we present the methodology behind setting up an M&T System. The flowchart below shows the steps involved in setting up and maintaining an M&T System. This newsletter covers the initial stages of setting up a Monitoring and Targeting System (first three boxes in the flowchart). The remaining stages (other four boxes in the flowchart) will be covered in future newsletters. A more comprehensive understanding of how to set up a good M&T System can be obtained by attending one of our M&T training courses, please see our website for dates and locations.

1. Understand Where Energy Is Used and Develop an Action Plan

Before structuring an M&T system it is important to build up a reasonable understanding of where energy is used in the factory and what factors influence consumption. It is only by doing this that you can develop an Action Plan, i.e. prioritise where to put meters and decide which production variables need to be measured. This will usually be done by carrying out an energy audit of the site.

2. Get Senior Management Commitment

To be successful M&T needs to be a site-wide initiative where staff from all departments work together to reduce energy consumption. This is almost impossible to achieve if an M&T enthusiast from one department works in isolation. A vital starting point is to get strong support from senior management. Energy M&T should become part of the site "management culture", with regular (but brief!) reports being made to your weekly site management meetings.

3. Measure Energy Consumption and Production

3a. Invest in Appropriate Meters

After you have built up a good energy balance it is a reasonably straightforward process to decide which are the most important things to meter. As a rule of thumb, any load that uses more than about £10,000 of energy per year is probably worth metering. Bear in mind that electricity and water meters are cheaper and easier to install than steam meters (by a factor of about 5), so concentrate on these first. Water meters can often be used to estimate steam usage with sufficient accuracy for M&T. In some situations an hours run meter (which is much cheaper still) may be just as useful as an energy meter (this is typically where the power consumption on a circuit is fixed – e.g. a ventilation fan or a lighting system). You may also need to make provision to measure "production variables" (for example if energy use is weather dependant you may need to measure degree-days).

3b. Decide How and When to Read Meters

A critical decision relates to meter reading methodology – should this be done manually or

automatically? There is plenty of equipment on the market to enable you to read meters automatically. This can be ideal for M&T as you can ensure consistency of reading time and can measure energy use on a minute-by-minute basis if this is helpful. **However**, automatic meter reading will add significantly to the cost of implementing M&T and it will usually introduce a significant delay (often of several months) before you begin to make savings. Also, in many cases it is impossible to gather data on production variables via the automatic system – they are only available on a weekly basis. In all but the largest factories, manual meter reading is usually a perfectly acceptable and practical option, providing you can ensure that meters are read on a consistent basis.

Another important decision is the length of the M&T cycle. For most food and drink factories we recommend a weekly data collection regime. This fits in well with the availability of production data and is sufficiently regular to identify problems quite quickly. Very small sites can use monthly data. Large sites may need to consider a daily M&T cycle, particularly for large point loads like ovens or boilers.

Sources of Useful Information

There are numerous excellent publications about the implementation of M&T available from the Energy Efficiency Best Practice Programme, including:

Energy Management Pathfinder (GIR63)

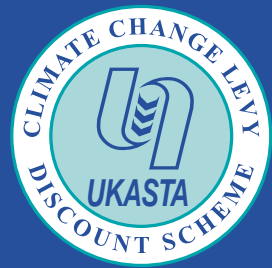
M&T for Large Companies (GPG112)

M&T for Small & Medium Sized Companies (GPG125)

Monitoring and Targeting at a Brewery (GPCS273)

Energy Monitoring and Target Setting at a Dairy (GPCS138)

Technical briefing



Introducing “the Focus Series”

In the Technical Briefing of each newsletter we intend to focus on a specific topic that is likely to be of interest to companies in the food and drink sector. In this newsletter we are describing energy efficiency opportunities related to boilers and steam systems. In subsequent newsletters we will cover topics such as refrigeration, compressed air and variable speed drives.

Focus on Boilers and Steam Systems

Boilers and Steam Systems

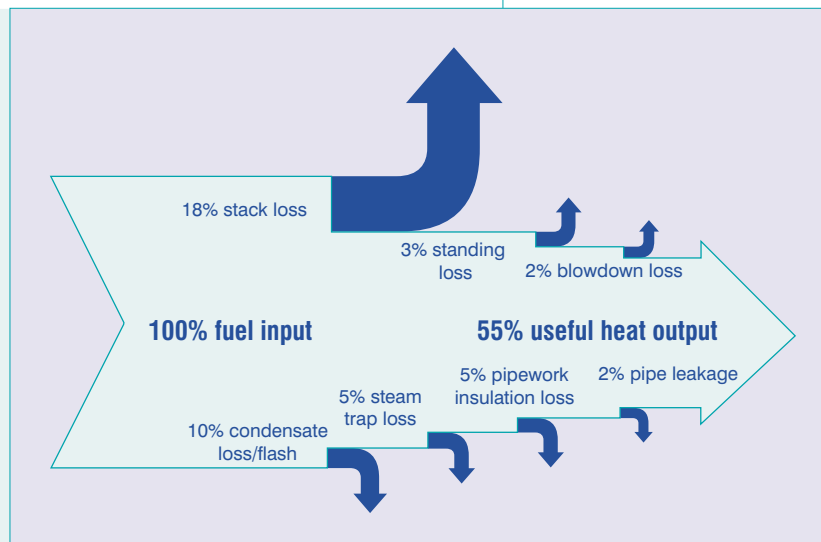
The majority of food and drink factories use steam (or hot water) boilers as a convenient way of distributing heat around the factory for process uses and sometimes for space heating. However, steam systems can be very inefficient unless they are used carefully and appropriately. The diagram shows that it is common to waste 40% to 50% of the energy input. You need to appraise each part of your steam system to minimise the level of these losses - a useful tip is to start analysing the problem at the heat load and work your way back to the boiler house.

Do You Really Need Steam?

In some situations the use of steam is not the best way to deliver heat. For example a small intermittent load at the end of a long steam main may be better served by a direct fired local heater. Space heating with steam heaters is usually inefficient as it is hard to accurately control the temperature. Water heating can often be carried out more efficiently with a direct gas-fired tank heater. Better still, you may be able to use a source of waste heat (e.g. from a refrigeration plant) to fully or partially heat the water. It is worth remembering that eliminating steam loads not only saves energy but can reduce other costs such as water treatment and boiler maintenance.

Is the Steam Distribution System Optimised?

There are many potential sources of loss in the steam distribution system. It is vital that insulation standards are good – don't forget to insulate flanges and valves as well as straight pipe runs. The mains should be properly trapped and vented and these devices should be regularly checked for leaks. In some factories the steam main can be rationalised to minimise pipework losses (e.g. removal of unnecessary pipe runs, reduction of pipe size). Also you might be able to isolate part of the steam main if it supplies a part of the factory that doesn't always require heat.



Are You Maximising Your Condensate Return?

It is important to return as much hot condensate as possible to the boiler house. If necessary consider condensate pumps and flash steam heat recovery.

Is the Boiler System Well Maintained and Controlled?

About half the losses shown in the diagram are in the boiler house itself. It is vital that you regularly measure the efficiency of the boiler system and take steps to minimise the losses. Technologies such as oxygen trim and combustion fan variable speed control are often a very good investment. Use your M&T system (see Energy Management Briefing) to check that performance is not drifting away from optimum.

Can You Improve the System Design?

A number of technologies can be considered to improve the performance of the system. An economiser could be fitted to recover waste heat from the boiler flue. A blowdown heat recovery system can recover heat from a continuous blowdown system. Flue gas dampers can reduce standing losses from boilers on hot standby.

Sources of Useful Information

This brief focus on boilers and steam system only scratches the surface of a complex topic. Some useful sources of more detailed information available from the Energy Efficiency Best Practice Programme include:

- Reducing Energy Consumption Costs by Steam Metering (GPG18)
- Energy Efficient Operation of Industrial Boilers (GPG30)
- Energy Efficient Heat Distribution (GPG197)
- Steam Generation Costs (ECG66)
- Steam Distribution Costs (ECG67)

Training Courses

We have had tremendous interest in the training courses that were introduced in the last newsletter. Over 80 people have already registered to attend “**How to Meet Food and Drink Industry Targets**” and over 60 people are registered on “**Setting Up a Good M&T System**”.

By popular request we have organised an extra training course to be held in Belfast – this will be a 1 day course combining material from both the courses described above and is scheduled for November 1st. The 3 courses planned for Glasgow have proved less popular and have been combined into a single 1 day course to be held on October 24th.

There may still be a few places left on our courses – check the Training page on our CCLA website for details and a registration form.

Company Courses

We have been approached to run “in-house” training courses for large companies – please contact the help line if your company is interested.

We intend to hold further training courses early in 2002. These will include detailed 1 day technical courses on refrigeration, compressed air and boilers/steam systems. We can also re-run any of the courses described above if there is suitable demand. Please use the form on the CCLA website to register interest in any of these courses – your responses will help us plan suitable locations for each course.

UKASTA CCL Discount Scheme,
P.O. Box 253,
Salford M5 2RS
Tel: 0161 874 3668
Fax: 0161 848 0181
e-mail: ukasta@ccl Levy.com
Website: www.ccl Levy.com/ukasta

Key Activities September to December 2001

You will have received data collection forms for CCL Year 2 (October 2000 to September 2001) with this newsletter. *It is essential that this data is returned to Enviros by November 16th 2001.* The data will be collated to produce an overall report of sector performance that must be submitted to the Government at the end of December. At this time we will also send each company a feedback report showing a summary of their performance from the Base Year to the end of CCL Year 2 and providing an update on sector benchmark data.

Some of the CCL Admin. Team

Ever wondered what we look like?

From left to right:
Surish Pal, Julie Gartside,
Paul Bromley,
Helen Fairclough,
Ray Gluckman, Claire Shaw
and Lesley Butterworth.



CCLA Timetable – Next 18 Months

October 2001	November 2001	December 2001	January 2002
First Milestone Year	First Milestone Year	First Milestone Year	First Milestone Year
The clock starts ticking! First milestone year begins. Request for Data for CCL Year 2 (Data for period October 2000 to September 2001). Deadline for reporting result of CHP Analysis Stage 1.	Deadline for return of data for CCL Year 2. CHP Assessment Stage 2 Methodology circulated to Sites passing Stage 1.	Feedback of CCL Year 2 Data and Sectoral Benchmarking.	Report of Sector performance to DEFRA. Deadline for reporting result of CHP Analysis Stage 2.
October 2002	November 2002	December 2002	January 2003
CCL Year 4 begins. Request for Data for First Milestone Year (CCL Year 3, data for period October 2001 to September 2002). Deadline for reporting result of CHP Analysis Stage 3.	Deadline for return of data for First Milestone year.	Feedback of 1st Milestone Performance. Issue of emissions trading certificates (to sites that have beaten target).	Emissions trading “window”. Report of Sector and Site Performance to DEFRA.

Useful Contact Details

Contact	Telephone Number	Web Site
UKASTA CCL Help Line	0161 874 3668	www.ccl Levy.com/ukasta
Energy Efficiency Best Practice Programme	0800 585 794	www.energy-efficiency.gov.uk
Enhanced Capital Allowances		www.eca.gov.uk
Department of the Environment, Food and Rural Affairs (DEFRA)		www.defra.gov.uk
HM Customs and Excise	0161 261 7079	www.hmce.gov.uk

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