

DAIRY ENERGY SAVINGS CLIMATE CHANGE LEVY
INFORMATION AND APPLICATION PACK
2005

INTRODUCTION

This Information Pack is aimed at providing you with all the information needed to complete the Dairy Energy Savings Limited (DES) application form, however, further information can be obtained from the CCL web site operated by The Department of Environment, Food and Rural Affairs (DEFRA) (www.defra.gov.uk/environment/ccl/papers.htm).

This agreement enables eligible facilities to obtain an 80% discount on the Climate Change Levy (CCL). CCL came into force on April 1st 2001.

Here we will summarises key aspects of Dairy UK Climate Change Levy Negotiated Agreement, with further details laid out in a set of Dairy UK Information Notes included in this pack.

LEGISLATIVE BASIS

The legislative basis of the Climate Change Levy is the Finance Act 2000. Eligibility to enter into a Climate Change Agreement will be determined by reference to the Pollution Prevention and Control (England and Wales) Regulations 2000 (see Glossary for definitions of terms).

CLIMATE CHANGE LEVY BACKGROUND

In the Budget 99 the Government notified its intention to introduce Climate Change Levy (CCL) on energy use by business (not domestic) with effect from April 2001.

The levy applies to:

- electricity ;
- coal;
- coal and hydrocarbon derivatives such as orimulsion and petcoke; and
- natural gas and liquid petroleum gas (LPG)

The Government already has measures in place to help reduce road transport emissions, so it does not propose to extend the levy to diesel, petrol and road fuel gases (Liquid Petroleum Gas (LPG) and Compressed Natural Gas (CNG)) used by road vehicles.

The levy adds approximately 12 to 15 per cent to your company energy bill. In conjunction with the introduction of the levy, Employers' National Insurance Contributions have been cut by a 0.3 percentage point, together with additional support for energy efficiency measures. As a major energy user the tax falls heavily on the Dairy Industry. The Government declares that it is giving special consideration to the treatment of energy intensive sectors, such as the Dairy Industry, given their high energy cost.

Certain industrial sectors which the Government views as energy intensive have been permitted to enter into agreements with DEFRA under which companies in the sector that have agreed to implement all energy saving measures which are cost effective, now receive an 80 per cent rebate from the levy.

RATES OF LEVY

1. The climate change levy came into effect from 1st April 2001. All non-domestic energy users is subject to the levy, which apply as follows:

<u>Fuel</u>	<u>Rate of levy</u>
Electricity	0.43 p/kWh
Gas	0.15 p/kWh
Coal	1.17 p/kilogram
LPG	0.96 p/kilogram

Certain fuels and activities do not count towards the calculation of a company's use of energy. These include:

- Input and output energy used in CHP and which qualify as "good quality" under the CHP Quality Assurance Scheme.
- Energy from renewable sources, excluding large scale hydro.
- Fuel oils which are already subject to other forms of tax.

[NB. Note that CCL is not charged on the use of gas in Northern Ireland for the first 5 years of the levy's operation]

Energy supplied at low rates/small quantities is exempt from the levy. Those using amounts below the threshold would therefore not need to join an agreement. The zero rate will be applied automatically by your energy supplier. The precise definitions of this exemption are contained in paragraphs 8 and 9 of Schedule 6 of the Finance Act. This is complicated, and if you think this might apply to you, you should seek advice. As a rough guide the exemption applies to energy supplies not exceeding:

- Gas supplied through pipes – 45 kiloWatt hours (kWh) per day
- Petroleum gas supplied in cylinders the net weight of each is less than 50 kilos and where fewer than 20 cylinders are supplied, or the gas is not for sale by the recipient
- Electricity – 35 kWh per day

QUALIFYING ACTIVITIES

Only those facilities that fall within the dairy sector definition below can be administered under the DAIRY UK CCA:

"The purchase of raw milk or a commodity produced from raw milk in order to convert it into liquid drinking milk, dairy products, or composite dairy products, or any other commodity of which milk is a substantial ingredient; and the use of similar manufacturing processes to those used to produce dairy products in respect of other food or drink products (by organisations which purchase raw milk and the processing of milk is the organisation's dominant activity)."

The essential requirement for a process to be deemed eligible, it must form an integral part of the processing of milk.

KEY AGREEMENTS

There are three agreements central to the CCL arrangements:

1. The first is an Umbrella Agreement signed by both DEFRA and Dairy Energy Savings Limited (a company set up by Dairy UK to administer climate change levy). This sets out the basic rules which will apply and the targets to be met by the industry as a whole. This is not legally binding.
2. The second agreement, the Underlying Agreement, is signed by DEFRA and the individual participant (facility). It sets out the rules to apply to the particular sites involved in the scheme. This is not legally binding.
3. The third (and binding) agreement, the Participation Agreement, is an administrative contract between DES Ltd and the individual participating company setting out what each party has to do and providing for the payment of fees to DES Ltd.

GETTING THE DISCOUNT

Once you have entered the DES Ltd Agreement, HM Customs and Excise are responsible for informing the utility companies of your certification to a CCA. Your energy suppliers will then make adjustments to your billing to give you the Levy discount

INDIVIDUAL AND SECTOR TARGETS

The Dairy Sector target has been set through negotiations between the Government (DEFRA), and DES Ltd. The agreed energy saving target is set at 10% of "primary" energy usage for all facilities entering into the dairy sector CCA.

Following detailed negotiations DES Ltd and DEFRA have determined the overall energy savings which the industry must achieve by 2010 and also "milestone" targets to be achieved at two yearly intervals. These milestone targets are listed below:

The target is expressed as a percentage improvement in performance from the energy consumption in the baseline year.

Target 10%	
Base Year	
Milestone	Total
0	0.00%
1	2.30%
2	5.95%
3	7.30%
4	8.65%
5	10.00%

Each site must submit data from the base year. Your target will be calculated from your base year data. The rules provide that a participant's base year can be a period of 12 consecutive months (which they themselves can choose) between 1990 and the present. The data that is submitted for the chosen base year must be robust, auditable data capable of being checked by government. The Application Form sets out the actual details required.

The milestone periods are:

Milestone	Date
0	1 st April 2001 to 31 st March 2003
1	1 st April 2003 to 31 st March 2005
2	1 st April 2005 to 31 st March 2007
3	1 st April 2007 to 31 st March 2009
4	1 st April 2009 to 31 st March 2011
5	1 st April 2011 to 31 st March 2013

In order to be certified for each milestone period a site must meet the interim targets based on a "Target Period". A target period is a 12 month term occurring before the end of each milestone period and data will be gathered at the end of each target period in order to judge if the site has met this interim target. The dates of each target period are listed below:

Target period	Sector target
<i>1st October 2001 to 30th September 2002</i>	2.30%
<i>1st October 2003 to 30th September 2004</i>	5.95%
<i>1st October 2005 to 30th September 2006</i>	7.30%
<i>1st October 2007 to 30th September 2008</i>	8.65%
<i>1st October 2009 to 30th September 2010</i>	10.00%

HOW YOUR ENERGY AND PRODUCTION DATA IS USED TO QUANTIFY MEETING OR MISSING THE TARGETS

Your individual target can be expressed in one of four ways:

1. Specific energy consumption in kWh per tonne of product, or tonne of milk utilisation (relative target)
2. Specific carbon emissions in tonnes carbon per tonne of product, or tonne of milk utilisation (relative target)
3. Absolute level of energy consumption in kWh
4. Absolute level of carbon emissions

The first two options are based on your Specific Energy Consumption (SEC), therefore this sort of target would take into account an increase in production on site, because it is based on how much energy it takes to produce a unit of product. Therefore in theory if your production increases so should the efficiency of that site, because the plant is being utilised to a greater extent. However, an absolute target is based on the total energy used on site irrespective of product. If you choose an absolute target, be aware, if the annual level of output of a facility during a target period is less than 90% of the annual output of that facility when the targets applying to the facility were set, those targets shall be varied to take account of that fall of output if they are absolute targets.

The target for each site can be either kWh (energy), or carbon. A carbon target would be most useful to sites that have or will change the fuels they use on site from more “dirty” fuels, such as oil, to “cleaner” fuels, such as gas. Just by converting to a cleaner fuel can go some way to a site meeting its targets.

There is scope for changing the “currency” of your target during the life of the agreements, however, this is limited. A site can change between carbon and kWh only once. If you start with a relative target you can change to an absolute target, but not back again; however, if you start with an absolute target you can change to a relative target and also back again to an absolute target.

THE IMPORTANCE OF MILESTONE TARGETS

Once every facility that has joined the DES Ltd CCA returns its 12 month target period data to DES Ltd, it will be processed and assessed as to whether or not each facility, and also the sector as a whole, has met its milestone target. If the sector meets its milestone target the Government will re-certify the whole sector and look no further to ascertain if individual sites have met their target or not. However, if the sector does not meet its milestone target then the Government would look at the data from each site and only the sites that have met their milestone target would be re-certified, thus receiving the rebate for the next two years.

The Government has proposed certain risk management options that will be considered if you have missed your target. These options will be discussed later in the document.

The Government has recognised that of the sites which participate in the Climate Change Levy Arrangements, some will make savings over and above their targets and others, for various reasons, will not achieve their targets. If a facility does not meet its target then they

can go into the market and buy that saving in the form of carbon dioxide emissions. The flipside to this is a facility that has more than met its target can sell that surplus into the carbon dioxide emissions market. However to sell carbon dioxide emissions, a facility is required to have their data from that target period verified by a DEFRA approved verifier.

THE EFFECT OF CHP ASSESSMENTS

When DES Ltd agreed an energy savings target for the Dairy Sector of a 10% reduction in energy by 2010 with DEFRA, it was agreed without the inclusion for the potential of Combined Heat and Power (CHP) within the sector. Therefore, within the Underlying Agreement (PP3.02), Section 6.8, Obligations of Operator, it states that:

“The operator shall ensure that an appraisal is carried out of the potential for use, or additional use, of combined heat and power in the facilities to which this agreement applies. The appraisal shall be carried out in accordance with a procedure specified by the Secretary of State in a notice served on the operator. The operator shall submit a report to the Secretary of State setting out the results of the appraisal by no later than 30th September 2002.”

All existing companies in the Agreement have already carried out Stage 1 of the CHP Assessment. Therefore all new entrants to the Agreement must ensure that they complete this Stage as part of the application process.

Stages 2 and 3 were meant to be completed by 30 September 2002, but the Assessment Procedure has been postponed by DEFRA until further notice.

INTERFACE WITH POLLUTION, PREVENTION AND CONTROL REGULATIONS

If your site is required to obtain a PPC licence to operate, i.e. sites that process more than 200 tonnes of milk a day, then being a part of a CCA your site will be deemed to have complied with the energy efficiency part of PPC.

NEXT STEPS

Once you have completed both the DEFRA Eligibility Form, DES Ltd Application Form and the CHP Stage 1 Assessment and returned them to DES Ltd, we will then assess whether your site is indeed eligible to join the scheme. If you qualify, DES will draft Underlying and Participation Agreements to reflect your individual circumstances and forward them to you together with an invoice for DES Ltd joining fees. We would ask that you check both of these forms and then sign them before returning them along with a cheque (for joining fees) to DES Ltd.

DES Ltd will then add your data to the data of all the existing sites in the agreement and calculate the dairy sector target, which will take the currency of the majority of the sites (weighted by total energy).

Under the terms of the Umbrella Agreement DES is required to report each year on progress which has been made by the industry towards reducing energy consumption. In milestone

years, this report will take the form of a summary of detailed reports by companies of their energy usage. Both the Umbrella and Underlying Agreements set out the detail which is required. The 12 month cycles will be the period 01 October to 30 September on each occasion. The next target period runs from 01 October 2004 to 30 September 2005.

Companies with multi-sites have the option of entering into a single agreement covering several sites or making each site the subject of a separate agreement. Multi-site agreements have the effect of creating a single target which has to be met by the total energy use of the sites covered.

ACCURACY OF YOUR DATA

Although DEFRA allows companies to submit data which they have collated themselves, you must ensure that it is robust and capable of audit. If DEFRA discovers at any stage that a company's data is wilfully incorrect, this might constitute fraud and be actionable.

REVIEW OF THE TARGETS

The targets set out in the Umbrella and Underlying agreements will be reviewed at the end of 2004 and 2008. If a company is unhappy with a new target, there are procedures for objecting and, ultimately, the agreement can be terminated if necessary.

CHANGING PRODUCT MIX/THROUGHPUT

The Umbrella and Underlying agreements provide, in the case of relative targets, for those targets to be changed to take account of product mix or throughput changes. Based on information which you provide, we will tailor your agreement with DEFRA so that this is reflected in your targets for the period.

DAIRY ENERGY SAVINGS LIMITED FEES

DES has decided that its fees will be charged on total kWh of delivered energy used on site and which is eligible for a CCL rebate (total eligible kWh). There will be an initial joining fee and an annual fee. The annual fee will be split into two and collected on 01 January and 01 July each year.

Joining Fee	0.00446 pence per kWh
Annual Fee (January 2005 to December 2005)	0.0038627 pence per kWh

A minimum joining fee of £100.00 + VAT is applied. Then on a minimum annual fee of £100.00 + VAT is applied.

FURTHER INFORMATION NOTES

1. QUALIFYING ACTIVITIES

In deciding if your site is an eligibility facility you will need to establish what proportion of the energy used within the whole site is used within the processing and treating of milk, or milk equivalent. Only processes or operations that are involved within the processing and treating of milk, or processes or operations that are “directly associated” with the processing and treating of milk are eligible to receive the CCL rebate. Listed below are some examples of processes or operations that are NOT eligible:

- cold stores, depots and packaging plants which stand on sites where there is no treating and processing of milk taking place.
- Stand alone cheese maturation plants
- Forklift trucks
- Charging of milk floats
- offices

Directly Associated Activities could be seen as:

- on-site cold stores
- on-site cheese maturation areas
- on-site packing lines
- on-site laboratories
- on-site thermoforming operations (must be an integral part of the operation)
- other technical areas associated with the prevention of pollution on site

In order to validate your site as an eligible facility you will need to complete a DEFRA Eligibility Form for each site.

2. THE 90:10 RULE

Paragraphs 1 to 13 and Annex 1 which are set out below have been taken from DEFRA paper PP8 which explains the 90:10 Rule.

1. Where an energy-intensive installation consumes 90% or more of a site's energy use (expressed in primary energy terms), then all of the site energy use will be eligible to be covered by a climate change agreement. This will avoid the need for such sites to meter a small fraction of their overall energy separately.

$$\text{i.e. where } \frac{\text{energy used in energy intensive installation}}{\text{site energy}} \times 100 \geq 90\%$$

then all of the site will be eligible to be covered by an agreement.

2. In these circumstances the facility may be defined to be the entire site.
3. Where less than 90% of the site energy is used within the installation, the whole site would not be eligible to be covered by an agreement. In this case, a facility would need to be defined such that at least 90% of the metered energy is used within the energy intensive installation. This energy would need to be metered separately from the rest of the site.
4. In this context a site is an area of land falling within a continuous boundary which encloses the land used in connection with the operation of a PPC installation. For this purpose, however, an area of land may still be regarded as a single site even if it is dissected by a road, railway line or river. Other non-contiguous parcels of land would not, however, constitute a single site. Ownership of different activities within the site so defined will not be a consideration. (An agreement may be signed by one operator on behalf of all of the operators on a site.) However, any activities covered within the 90/10 rule will need to be related to the business which is carried out in the energy intensive installation. (Retail warehouses on the edge of industrial premises would not be eligible, for example).

Some examples are given in Annex 1.

5. In determining energy use, conventions for energy accounting set out in Schedule 2 of the Underlying Agreement should be used. These include the following provisions:
 - bought-in electricity should be multiplied by 2.6
 - electricity from certified 'new' renewables should not be counted
 - energy generated from on-site renewables should not be counted
 - electricity from dedicated power generators can be counted using the actual energy input to the generating facility rather than multiplying the electricity consumed by the 2.6 factor
 - steam imports and exports should be accounted for
 - energy from CHP imports/exports should be accounted for using the procedure set out in the Schedule.

6. Energy supplies should be allocated to where they are used as far as possible. If there is insufficient sub-metering to do this, they will need to be apportioned across the site as a whole in proportion to the relative levels of energy use on each part of the site.
7. Compliance with the 90/10 rule should be established by reference to a year's data at the start of the agreement. If more than one year's data is available, then this can be used to produce an average figure if that is preferred by the operator.
8. At the outset of the agreements, a reasonable degree of estimation may be used in determining whether a facility meets the 90/10 rule. In some cases, a top-down analysis of total site energy use may be sufficient to show that the 90/10 rule is met. If the main energy-using processes which form the energy-intensive installation are metered, then it may be simple to show that these use more than 90% of the energy used within the facility during the period by difference with the total energy used by the facility.
9. If, at the outset of the agreements, there is not full sub-metering of each of the main processes, it may be necessary to undertake spot metering of certain parts of the process and extrapolate to estimate the position over the period as a whole.
10. Auditors appointed by the Secretary of State may assess the definition of facilities and evidence will need to be available showing how the decision to define a facility was derived.
11. Subsequently, compliance with the 90/10 rule should be checked at the start and end of each target period (e.g. if the first target period in the agreement is Jan – Dec 2002, the facility's figures should be checked at the beginning and end of 2002). Again, a single year's data may be used or a rolling average, taken over a period of up to four years, if that is preferred.
12. In addition, if there are any significant changes that affect compliance with the 90/10 rule, the figures should be re-checked. If a facility becomes ineligible to be included within an agreement as a result of such a change, the operator should notify the Secretary of State immediately.
13. Further information on the 90/10 rule is contained in DEFRA paper PP8 - Guidance on the "90/10" Rule ¹.

¹ See <http://www.defra.gov.uk/environment/ccl/papers.htm>

Worked examples

Details for four sites (A, B, C, D) are shown in the table.

On site A the energy-intensive installation itself uses 90% of the site energy. Hence the entire site is eligible to be covered by an agreement.

Site B has an identical operation to site A, but it also has a separate operation which accounts for half the energy used on the site. Hence the energy-intensive installation uses only 45% of the site energy. The remaining 5% of energy use passes through the energy-intensive installation and is metered with it. All of this energy use would be eligible, together with the 45% of energy which is used by the energy-intensive installation.

Site C is the same as site B but only the energy used within the energy-intensive installation is metered separately. Hence only the energy-intensive installation itself, using 45% of the site energy, will be eligible to be covered by an agreement.

Site D is similar to site B except in this case the energy-intensive installation uses 40% of the site energy and a further 10% of energy is metered with it. In this case additional metering would be needed if any of this additional energy were to be covered by an agreement.

	Site A	Site B	Site C	Site D
Total site energy use (measured in primary energy units)	100	200	200	200
Energy-intensive installation energy use (primary energy units)	90	90	90	80
Energy used by activities metered with the energy- intensive installation (primary energy units)	10	10	10	20
% site energy in energy- intensive installation	90%	45%	45%	40%
% site energy use covered by agreement in absence of further sub-metering	100%	50%	45%	40%

3. NEW SITES OR SITES WITH NO BASELINE DATA

The information below is taken from DEFRA paper “CCA05 - Procedure for New Entries to Climate Change Agreements” and describes the process that needs to be undertaken for new sites, or sites with no data entering the CCA.

Sites with no data

DEFRA distinguish between sites that are **new** (or effectively new because the site has made major changes to the processes or products such that the earlier site data is no longer relevant) and sites that are **established** but do not have baseline data available, possibly due to lack of suitable metering, or that relevant data was simply not recorded. In neither case is it possible to establish accurate targets immediately. A tailored version of the underlying agreement to provide for the later setting of targets will be provided by the CCA Team.

Information required for new sites

For **new** sites, DEFRA will require:

- a commentary on the facility, setting out the standards of energy efficiency to which the plant has been constructed, including the extent of sub-metering (see Annex B);
- a plan for operating the plant in an energy efficient manner during the commissioning and bedding down phases, and for identifying opportunities for energy efficiency improvements;
- specification of the time period required to commission the plant and to establish a suitable baseline performance.

A limited period for plant optimisation is acceptable. The period to establish the baseline should be no more than six months unless otherwise agreed. The date by which the baseline and targets are to be established will be stated in the underlying agreement. The operator will be expected to supply relevant data to FES every quarter until the baseline is agreed.

Information required for established sites

For **established** sites, operators should:

- identify the time required to establish a suitable baseline, which may require installation of metering or establishing a robust regime to determine energy flows. The period to establish the baseline should be no more than six months unless otherwise agreed. The date by which the baseline and targets are to be established will be stated in the underlying agreement. The operator will be expected to supply relevant data to FES every quarter until the baseline is agreed.

Target setting for sites without data

1. Targets will be agreed between the Secretary of State and the operator (via the sector association) when the baseline is established. Targets shall have effect from the start date of the agreement, or an earlier year in line with the Sector’s umbrella agreement if that data can be accurately interpolated from the baseline measurement period.
2. As the targets will take account of those measures being implemented whilst the baseline is being established, the facility will have to undertake such measurement as is required to

extrapolate back to establish the energy usage at base line. Once this base position is available, it will be possible to establish whether the facility has met its milestone target in due course. It will be an essential part of these new initiatives that the relevant local parameters are measured before the initiative is put in place, such that an accurate estimation of the overall base position may be evaluated.

3. For new sites constructed to best practice energy standards, the targets may require only constant performance until the first review at 2005, when a review of baseline data and improvements in technology may justify targets showing an improvement in energy performance. If the plant has not been constructed to best practice standards, targets for the early milestones before the baseline is established may require additional energy efficiency activity if the plant has not been constructed to best practice standards. These issues will be decided on a case by case basis, in discussion with FES.

ANNEX B - COMMENTARIES FROM NEW ENTRANTS ON GREEN-FIELD SITES

For new entrants to CCL agreements who have green-field sites, DEFRA will require a commentary on the new facility to supplement the application. This commentary should provide evidence of the standards to which the facility has been constructed. DEFRA will set targets on the assumption that the facility has been constructed to best practice standards of energy efficiency and will set targets accordingly. The commentary should include the following items:

Description of the Facility

1. This description will need to include details of the equipment to be used, a description of the production process/product flow, the end product(s) and details of the expected level of output (the production profile).
2. DEFRA will need information on the energy efficiency best practice standard of construction, including the age of equipment, energy ratings and any details of energy efficiency (e.g. have EFF1 motors been used). If the facility has an IPPC permit, then the application and/or subsequent correspondence with the relevant authority (Environment Agency or Local Authority) can be used as supporting evidence.
3. If a commissioning programme is required on the site before normal production can begin, DEFRA will require details of the operation and duration of the period.
4. Finally the description of the facility should demonstrate that an adequate level of sub-metering has been (or will be) provided to record energy use within the eligible areas.

Energy Plan

1. The operator must provide an energy plan describing how the facility will be managed to ensure optimum energy performance. This will obviously be a living document and will develop with time, but it must satisfy the qualitative requirements that will be in Schedule 3 to the underlying agreement.
2. It is recognised that during the commissioning phase it may not be possible to run the plant as energy efficiently as it will be once commissioning is complete. Nevertheless, the energy plan should provide for checks to ensure that energy is being used economically during commissioning.
3. The energy plan must also lead to the setting of targets promptly after the conclusion of the agreed baseline period.

This information should be sent to DES along with a completed Eligibility Form PP4 if you are a new site or a site with no data entering the agreement.

4. PLANNING, REGULATORY AND INFRASTRUCTURE CONSTRAINTS

The following seven paragraphs have been taken from DEFRA paper “NA(00)52: Planning, Regulatory and Infrastructure Constraints” and explain the position on Planning, Regulatory and Infrastructure Constraints.

“The draft agreements provide for the Secretary of State to take account of relevant considerations in deciding whether progress towards meeting targets is satisfactory.

The only considerations which are “relevant considerations” for the purposes of paragraph 7.4(a) in the draft Option 2 umbrella agreement are planning and regulatory constraints, and constraints imposed by infrastructure such as energy supply networks, which have had a major impact on a company’s expected performance and prevented the target from being achieved. These are factors which are outside of the company’s control and which are inconsistent with the assumptions on which the targets were based.

Schedule 2 of the draft underlying agreement also provides for specific planning and regulatory constraints to be identified for individual participants. These could be factors which are identified at the start of the agreement and which form part of the assumptions on which a participant’s targets are based. These may include, for example, the gaining of planning permission for new developments which are necessary to achieve targets at particular milestones.

This note sets out DEFRA’s proposals for the scope of ‘planning and regulatory constraints’ which may be considered within the climate change levy agreements.

Planning and regulatory constraints may include the following:

- Failure to gain, or delay in gaining, planning approval for a new or replacement plant expected to deliver an energy efficiency improvement. It would be necessary to show the effect that the new plant was expected to achieve. It would also help a participant’s argument if the proposal for the plant was set out as an assumption underpinning a participant’s proposed target, or if it featured in a participant’s improvement plan prepared to meet the qualitative requirements of the agreement.
- Failure to gain, or delay in gaining, approval for a new or replacement CHP plant under Section 36 of the Electricity Act 1989 or Section 14 of the Energy Act 1976.
- New regulatory requirements, or revised interpretations of current legislation (eg tighter emissions limits), which require a significantly increased level of energy consumption. These requirements may result from environmental, health and safety, food hygiene or other legislation. The requirements would need to result from new legislation that was not anticipated at the time that agreements were signed. Participants would be expected to anticipate the impacts of existing or forthcoming EC Directives (including IPPC) unless it is not possible at present to make a reasonable prediction of how these may affect participants at the site level.
- Inability to implement new energy efficiency measures (particularly CHP) where prevented from doing so by constraints in the gas or electricity networks. This will not apply if the constraint existed at the outset of the agreement and it could not reasonably be expected that it would have been overcome before the energy efficiency measures were required to be implemented.

No account would be taken of the effects of existing legislation where this has already required companies to develop improvement plans or take other action and where the implications can be ascertained at the site level.

Regulations that affected the demand for a company's products would not be taken into account under this provision. Changes in demand for products should be considered using the provisions for dealing with changes in product mix or output level (applicable only to participants with relative targets)."

If you feel that your product mix will not significantly change over the course of the agreement, or if you have opted for an absolute target, then you could choose to have a Tolerance Band. This tolerance gives you the flexibility to miss your milestone target by 25% of the difference between each milestone.

Assumptions

The Underlying Agreement allows the company to identify certain assumptions on which it relies in being able to meet its target. It cites two examples:

1. That a new or replacement installation will be constructed.
2. That a CHP plant will be utilised.

These "assumptions" will come into play if DEFRA has to judge if a facility has met its target based on

- a) The qualitative requirements having been met; and
- b) The facility target having failed to be met due to a relevant constraint or requirement if that restraint or requirement is inconsistent with an identified assumption.

As you might expect, the constraints and requirements are limited in scope and relate to legislation on town and country planning, environment, health and safety or food hygiene; restrictions relating to the construction or operation of a combined heat and power plant; and the constraints imposed by the gas or electricity networks on the construction or operation of a combined heat and power plant.

In the two examples which have been cited above, DEFRA goes on to say that if a company had made the assumption that a new or replacement installation was to be constructed but in fact planning permission was refused, that would be a case where a relevant constraint was inconsistent with an assumption made. In the second example, refusal of consent under the Electricity Act 1989 would be considered a relevant constraint.

In completing an application form to join the DES CCA, companies will need to complete a section setting out what they believe to be appropriate assumptions. These will in due course be inserted into an Underlying Agreement. DEFRA will doubtless study any such assumptions before signing-off any such agreements.

5. QUALITATIVE REQUIREMENTS

For further information on Qualitative Requirements.

“Participants must show that they have in place a formalised and structured energy management system. This should address certain commitments and procedures under the following headings:

- Policy
- Planning and Organisation
- Monitoring and Control
- Reporting
- Review

(In addition, the CCL agreements’ ‘Qualitative Requirements’ include the necessity that a site requiring an IPPC authorisation should meet the IPPC ‘base-line’ energy efficiency requirements as and when the site is brought within regulation under IPPC).

Under each heading therefore, this document explains the clear objectives (paragraphs in bold type) of each part of the energy management system. Participants must meet these objectives. The document also lists key elements of any approach to meeting these objectives. However, while a participant would be expected to implement all or most of these elements, the degree of detail required in each element, and the exact approach to be taken, will depend on the size of the participant's company/site, its energy use, and the pre-existing systems in place.

It is also essential for participants to go beyond having policies, plans, and procedures. There must be evidence that these are acted upon, and that there is consequent and related improvement to equipment and its operation.

POLICY

Each participating company should have in place a formal energy policy that demonstrates the company’s commitment to continuous improvement in the use of energy, and to meeting the Negotiated Agreement quantitative targets. It should explain the key approaches that the company will take to achieve these combined objectives.

The Policy will:

- *Set out the aims for energy management. These should include the aim to meet or exceed the quantitative milestone targets in Negotiated Agreement;*
- *Demonstrate the Company’s commitment to managing energy in a way that both supports good business performance and takes due regard for environmental effects;*

- *Commit the company to having a continuous improvement programme for its energy use. This will include regular surveys of the main energy consuming parts of the company, which will identify means of reducing energy consumption by:*
 - *improved 'house-keeping' measures*
 - *improved management and control of processes*
 - *installation of better processes, either by retrofits or new build*
 - *increased use of Combined Heat and Power where appropriate;*
- *Commit the company, when capital investments are planned, to giving energy efficiency due regard in the selection and configuration of plant, and adopting the most energy efficient equipment available when the marginal cost is justifiable;*
- *Recognise the need for adequate resourcing and reporting throughout the company of energy management, and the need for measurable objectives;*
- *Identify the Director or Senior Manager with overall responsibility for the energy policy and its implementation;*
- *Commit the company to a regular review of the Policy.*

PLANNING AND ORGANISING

To achieve the aims and objectives of the energy policy, there should be clear and formalised responsibilities and plans in place that are linked to the Negotiated Agreement targets, and appropriate procedures for plant procurement and operation.

There should be:

- *Documented roles and responsibilities, including identification of who is responsible for energy use in each major energy using facility;*
- *Plans which set targets for energy savings, and supporting action plans;*
- *Appropriate methods for communication, to ensure that policies and procedures are understood and that management commitment to them is visible;*
- *Training plans, both for energy managers and the workforce as appropriate;*
- *Procedures for appropriate planned and emergency maintenance of equipment, and for its replacement;*
- *Procedures for assessing the cost-effectiveness of an energy saving measure. These should take a view of savings over the lifetime of the measure.*

MONITORING AND CONTROL

A system for monitoring and controlling performance should be set up. This should provide the information necessary for monitoring progress against the plans, and enable improvement actions to be identified.

Monitoring and control activity, appropriate to the size of site and level of energy use, should:

- *measure the principal energy flows on each site that is covered by the Negotiated Agreement;*
- *report energy use in appropriate units to operating managers at a frequency appropriate to the quantity of energy consumed;*
- *provide standards of performance that managers are charged with achieving;*
- *allow the review of achievements against standards in order to identify where action needs to be taken;*
- *allow the review of standards periodically so that they may be tightened as performance improves.*

REPORTING

Companies should provide management reports on energy use and management (progress against plans, conclusions from regular reviews, etc) in a way appropriate to the size and complexity of the company.

Reporting should include:

- *progress reports as necessary or as required by the appropriate senior management body (eg Board) in order to ensure adequate control and review of objectives;*
- *frequent reports for operational management control;*
- *reports on energy use and related data to the relevant sector association at the frequency that it requires or is necessary to ensure reporting to the DEFRA.*

REVIEW

Regular reviews close the management system loop. They give the opportunity to stand back, consider whether the energy management system which is being employed remains appropriate, and to decide whether modifications are needed. Companies should conduct such reviews regularly.

Reviews should include:

- *consideration of the policy (its aims and objectives, scope, adequacy);*
- *comparison of quantitative performance against targets;*
- *comparison with benchmark data (where available);*
- *A review of the barriers to the implementation of energy efficiency improvements, and proposals for addressing these as far as is possible.”*

Fulfilling the Requirements

DES has produced Qualitative Requirements documents that can be used to ensure that you implement efficient energy management plans and energy monitoring systems in line with the requirements of the Underlying Agreement. To receive copies of these documents and the accompanying guidance notes please contact us.

6. AUDITING OF CCLA MEMBERS

The following information is taken from DEFRA paper CCA(01)03 Part C and outlines the information that all CCA members need to keep in case they are selected for a random audit. These notes do not set out additional CCA requirements. Alternative procedures that achieve the same standards are acceptable.

“It is recommended that the following information be kept by each operator in an ‘evidence pack’.

- Evidence of a formal appointment of a CCAs project manager and a deputy.
- Written procedures for data collection, handling, transfer, and error checking. Plus any procedures for product mix, throughput change calculations and activity factors.
- Copies of CCA data submissions to the sector association/DEFRA (That is the information supplied in the PP4, and the information supplied to the operator’s sector association as described in Schedule 4 of the Underlying Agreement).
- A map or equivalent document indicating eligible areas, input and output energy flows and production. Any meters used in the monitoring process should be identified on the map or in the document.
- Production records.
- Energy records - copies of each invoice for energy streams, e.g. electricity, gas, and fuel oil, or if own meters are used instead of utilities metering, then verifiable records of readings should be kept.
- Meter readings/calculations/justifications for any other energy flow onto and out of the facility (e.g. steam).
- Where energy is split between eligible and non-eligible parts of facility, then a description of apportionment method should be written down and kept.
- Descriptions of conversion factors used and related calculations carried out
- Copies of annual energy and production spreadsheets used in the CCAs data gathering exercise
- Written evidence of data checking and any follow-up as a result of errors found.
- Evidence of notification and agreement of any adjustments to data due for example to variations in gas calorific values and originally-estimated meter readings.
- Evidence/justification of energy use of each product, where product mix is an issue.
- Evidence/justification of variation of energy use with output, for use in any throughput change adjustment.
- Evidence to support any exemption of energy use from the Climate Change Levy and/or from energy targets within a CCA.
- Records of qualitative measures/progress on energy efficiency measures.
- Any other information on specific discussions on CCAs with Sector Association and DEFRA.
- Certificates of any carbon trading.
- Any other relevant internal documents.

Information for the evidence pack can be kept in hard-copy or electronic format.”

Further information on CCA Audits will be sent to you by DES on joining the agreement.

7. THE ENHANCED CAPITAL ALLOWANCE SCHEME

The paragraphs in this section have been taken from ECA web site. www.eca.gov.uk and explain the position on the Enhanced Capital Allowance Scheme.

Enhanced Capital Allowances (ECAs) enable a business to claim 100% first-year capital allowances on their spending on qualifying plant and machinery. There are three schemes for ECAs:

- Energy-saving plant and machinery
- Low carbon dioxide emission cars and natural gas and hydrogen refuelling infrastructure
- Water conservation plant and machinery

Businesses can write off the whole of the capital cost of their investment in these technologies against their taxable profits of the period during which they make the investment.

This can deliver a helpful cash flow boost and a shortened payback period.

The following areas are eligible for ECA:

Boilers	Motors
Refrigeration Equipment	Variable Speed Drives
Thermal screens	Heat pumps for space heating
Lighting	Solar thermal systems
Combined Heat and Power	Warm air and radiant heaters
Pipe insulation	Compressed air equipment

Water Conservation Plant and Machinery

Enhanced Capital Allowances are available for capital spending from 1 April 2003 on designated water efficient technologies. The Water Technology List will be published shortly and claims can be made once the Finance Bill has received Royal Assent.

Cars with low CO₂ emissions

Enhanced Capital Allowances are available for capital spending from 17 April 2002 to 31 March 2008 on:

- New cars with carbon dioxide emissions of not more than 120gm per kilometre driven for use in their business
- Natural gas and hydrogen refuelling equipment at refuelling stations

The Inland Revenue has published guidance on these allowances which is available here 'ECAs for cars with low carbon dioxide emissions'
http://www.inlandrevenue.gov.uk/capital_allowances/cars.htm

8. INTEGRATED POLLUTION PREVENTION AND CONTROL

The paragraphs in this section have been taken from the DEFRA paper PP9 and explain the position on IPPC.

What is Integrated Pollution Prevention and Control?

Integrated Pollution Prevention and Control (IPPC) is a system following the European Community Directive (96/91) which will introduce a more integrated approach to controlling pollution from industrial sources, across England and Wales.

The main aim of IPPC is to achieve:

A high level of protection of the environment taken as a whole by, in particular, preventing or, where that is not practicable, reducing emissions into the air, water and land.

The current systems for preventing and controlling emissions under Part 1 of the [Environment Protection Act](#) are;

- [Integrated Pollution Control](#) (IPC) which is for the most potentially polluting industries and is enforced by the Environment Agency
- [Local Air Pollution Control](#) (LAPC) which is for generally less polluting industries and is enforced by Local Authorities and concerns emissions to air only.

A new UK regime, [Pollution Prevention and Control](#) (PPC), will eventually replace the existing legislation (under Part 1 of the Environment Protection Act 1990) and implement the EC Directive on integrated pollution prevention. IPPC embodies an approach broadly similar to IPC but takes on a wider view of integrated permitting. The LAPC regime will be replaced by Local Air Pollution Prevention and Control (LAPPC) which is similar to IPPC in procedures but will still regulate emissions to air only. IPPC and LAPPC will both fall under the same regulatory framework of PPC.

In England and Wales, IPPC is being enacted through the Pollution Prevention and Control (England and Wales) Regulations 2000 (SI 2000/1973). Similar regulations will be introduced in Scotland (September/October 2000) and Northern Ireland.

Guidance on interpretation of the Regulations is available at <http://www.defra.gov.uk/environment/ppc/index.htm>

9. CONVERSION FACTORS

Carbon Intensity of Different Fuels

Fuel*	Carbon Emission Factor (kg/kWh)
Electricity	0.0453
Coal	0.0817
Coke	0.1170
Gas Oil	0.0680
Heavy Fuel Oil	0.0709
Petrol	0.0655
LPG	0.0627
Jet Kerosene	0.0655
Ethane	0.0545
Naphtha	0.0709
Refinery Gas	0.0545
Petroleum Coke	0.0927
Natural Gas	0.0518

To calculate the carbon dioxide emissions, multiply your primary energy of the fuel type by the appropriate factor from the table.

Fuel Conversion Factors

Under the Climate Change Levy negotiated agreements participants are required to report energy in terms of kWh based on the gross calorific value of fuels. Some fuels purchased are sold in non-energy quantities, e.g. litres, tonnes, etc. Consequently to convert to energy units the use of appropriate conversion factors is necessary.

For most fuels there is no standard figure for calorific value (cv), since cv varies over time and between individual suppliers' products. Consequently it is strongly recommended in reporting for CCLA purposes that participants use gross calorific values as provided by fuel suppliers for the particular fuels concerned. Suppliers will sometimes provide a range, in which case the median of the range should be employed. Certain energy suppliers will normally quote figures in terms of net calorific value rather than gross; in such cases the corresponding gross calorific value will need also to be obtained from the supplier.

Where it is not possible to obtain an appropriate supplier's value (perhaps for historic base-year data), those in the following table can be adopted:

Fuel	Gross calorific value in normal units of supply	Notes
Natural gas	Variable – usually billed in kWh	See supplier's invoice
Gas oil	10.83 kWh/litre	
Light fuel oil	11.53 kWh/litre	
Medium fuel oil	11.63 kWh/litre	
Heavy fuel oil	11.66 kWh/litre	
Commercial propane	13.89 kWh/kg	
Commercial butane	13.69 kWh/kg	
Coal and other solid fuels	Highly variable depending on type of fuel – valid figures from supplier.	

To convert		Operation	Constant
From	To		
ft ³	m ³	multiply by	0.02832
therms	kWh	multiply by	29.31
MJ	kWh	divide by	3.6

10. DEFRA ELIGIBILITY FORM DOCUMENT EXPLAINED

The DEFRA Eligibility Form is separate from the Application Form as a result of DEFRA insisting that we use their standard form. At first sight the DEFRA Eligibility Form is extremely complicated to complete, however, I will try to go through this form question by question to simplify it.

Question 1. Within the dairy sector only a narrow definition can be used for the purposes of entering into a Climate Change Levy Negotiated Agreement. That is “*Treating and processing milk*”. Therefore Question 1 has been completed for you. The definition of the sector, however, would allow companies who engage in food production processes similar to those used in liquid milk (e.g. orange juice processing) to also join the DES Ltd CCA if that company was primarily a milk processing company.

Question 2. N/A

Question 3. If daily intake of milk is greater than 200 tonnes, the answer will be yes

Question 4. The answer will be no

Question 5. The answer will be no

Question 6. Requires a detailed description of what you see as the eligible part of your site

Question 7. “Directly associated” activities are defined under IPPC and include operations such as raw material handling/storage, packaging and cold/chill storage. They also include support activities that are an essential requirement of the main process such as effluent plant, compressed air supply, washing systems for production equipment, quality control (if an integral part of production line management).

Areas like office buildings, general warehousing, R&D facilities and engineering stores are **not** eligible, unless they fall within the 90/10 rule.

Question 8. In the vast majority of cases the entire site is likely to form an eligible facility.

Question 10. Here you will list the parts of the site that fall within the 10% of non-eligible activities under the 90/10 rule such as, office buildings, general warehousing, R&D facilities and engineering stores.

Question 12. If all of your site does not qualify for the rebate when taking into account the 90/10 rule you are entitled to add a further 10% of non-eligible activities in addition to the eligible processes listed questions 6 and 7.

12. ADMINISTRATION OF CLIMATE CHANGE AGREEMENTS

The paragraphs in this section have been taken from the DEFRA paper Na(00)53 and explain the Administration of the CCLA.

CERTIFICATION PROCESS

This paper sets out current proposals for the process of managing the exchange of agreements and the associated issue of certificates and C&E notice. It applies only to Option 2 agreements.

Definitions

The **DEFRA Certificate** – the certificate that DEFRA issues to HM Customs and Excise stating that, for a period specified in the certificate, a facility is to be taken as being covered by a climate change agreement.

The **Supplier's Certificate** is the certificate sent by the participant to their energy supplier notifying the supplier of the reduced rate of levy and any other reliefs to be applied to the account in question.

The **Notice** – is the notice published by HM Customs and Excise in respect of the facility i.e. which will identify the facilities covered by an agreement.

Process

1. DEFRA receives a package from each sector association containing
 - Two signed copies of an umbrella agreement for the sector
 - Two signed copies of an underlying agreement for each participant
 - One signed eligibility form for each facility
2. The agreements and eligibility forms will contain a unique reference number for each facility in the form
AAA/x x x x x /y y y y where
AAA is a sector association acronym supplied by DEFRA
xxxxx is a unique alphanumeric code allocated to the participant by the sector association, and
yyyy is a unique number allocated to the facility by the participant.
3. DEFRA will check that the documents are in order i.e. that they are complete. Any omissions or other queries will be referred back to the sector association for action. DEFRA will decide whether to accept or reject the underlying agreements. If any are rejected, the sector targets will be adjusted accordingly. If the participants for those rejected facilities choose to appeal against this decision, and are successful, they will be treated as new entrants and the sector target re-adjusted accordingly.
4. DEFRA will issue a DEFRA Certificate to HM Customs and Excise listing the facilities which are covered by the agreement by name and unique reference number. DEFRA will copy this list to the sector association along with the umbrella agreement

signed on behalf of the Secretary of State. DEFRA will send a copy of the underlying agreement signed on behalf of the Secretary of State to the participant. This agreement will be the participant's proof that the facilities listed in it are covered by an agreement.

5. On receipt of the DEFRA Certificate, HM Customs and excise will publish a **Notice** listing the facilities covered by the agreement.
6. The participant will obtain **Supplier Certificates** either from the DEFRA website or from the sector association. He will complete the calculations necessary to inform the energy supplier of the reduction to the rate of levy that the energy supplier should apply to the energy account listed in the Supplier Certificate. He will enter on the Supplier Certificate the unique reference numbers of the facilities covered by the agreement. He will issue the Supplier Certificate to the energy supplier for the account. He may issue as many Supplier Certificates as necessary to cater for each energy account, provided the unique reference numbers for the facilities are quoted.
7. The energy supplier will take the necessary action to apply the correct rate of levy to the energy account. The energy supplier will then send a copy of **the Supplier Certificate** to HM Customs and Excise.
8. HM Customs and Excise will check that the unique reference numbers of facilities listed in the **Supplier Certificate** match those recorded on the relevant **DEFRA Certificate**. If any participant is found to be claiming a reduced rate of levy for facilities which are not covered by an agreement, HM Customs and Excise will take action. It is an offence to deliberately claim a reduced rate to which you are not entitled.

Milestones

9. At the end of the first milestone period, DEFRA will assess whether the sector has met the agreement target. If it has not, DEFRA will examine participants' performance against their targets. Where a participant has failed to meet the milestone the DEFRA will alert the participant that he is no longer entitled to the reduced rate and the participant should immediately submit a new Supplier Certificate to each of their energy suppliers accordingly. They will also remind participants that failure to do so may constitute an offence.
10. The DEFRA Certificate issued to HM Customs and Excise will list the facilities which are covered by the agreement, by name and unique reference number, for the second milestone period.
11. HM Customs and Excise will check the facilities listed on the Suppliers Certificates sent to them by the energy suppliers against the new DEFRA Certificates. Where a participant is no longer entitled to the reduced rate but has failed to submit a new supplier certificate HM Customs and Excise will take action.

13. CONTACT DETAILS

For further information please contact:

Gareth Stace

Environmental Manager

Dairy Energy Savings Limited

93 Baker Street

London

W1U 6QQ

Direct line: 020 7467 2602

Switchboard: 020 7486 7244

Fax: 020 7487 4734

Email: gstace@dairyuk.org

Web: www.dairyenergysavings.co.uk

For further information on the subject of energy savings please contact:

Carbon Trust

9th Floor

3 Clement's Inn

London

WC2A 2AZ

Tel: 020 7170 7000

Fax: 020 7170 7020

Email: info@thecarbontrust.co.uk

Web: www.thecarbontrust.co.uk

Action Energy

Tel: 0800 58 57 94

Web: www.actionenergy.org.uk

All of the documents published by DEFRA that relate to CCL can be found here:

<http://www.defra.gov.uk/environment/ccl/index.htm>