

# The Climate Change Levy and Enhanced Capital Allowance Scheme

To concur with the Kyoto Protocol, in 2001 the Government introduced an energy tax and an energy-efficiency incentives scheme, with the overall goal being to achieve a reduction in total greenhouse gas emissions. The UK figure is some 12.5% reduction in greenhouse gas emissions in the period 1998 - 2012 from a 1990 baseline.



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## What is the Climate Change Levy?

To discourage energy wastage, the Government introduced the Climate Change Levy (CCL), which is an energy tax that became effective on 01/04/01. This increased energy bills at the following rates:-

- 0.43p/kWh for electricity
- 0.15p/kWh for gas
- 0.96p/kg for LPG
- 1.17p/kg of coal

All businesses and public sector organisations in the UK pay the levy via their energy bills. The levy was projected to raise around £1 billion in the first year.

## What is the Enhanced Capital Allowance?

To further encourage firms to make energy saving investments, the Government introduced an incentives scheme called the Enhanced Capital Allowance (ECA). Under this scheme, expenditure on technologies and products on the Energy Technology List can qualify for 100% first year tax allowances.

The Energy Technology list of equipment and criteria is on [www.eca.gov.uk](http://www.eca.gov.uk). Currently the qualifying categories are:-

- **Air to Air Energy Recovery**
- Automatic Monitoring and Targeting
- Boilers
- Combined Heat and Power
- Compact Heat Exchangers
- Compressed Air Equipment
- **Heat Pumps**
- HVAC Zone Controls
- Lighting
- Motors and Drives (Variable Speed Drives)
- Pipework Insulation
- **Refrigeration (Packaged Chillers)**
- Solar Thermal Systems
- Thermal Screens
- Warm Air and Radiant Heaters

The list is dynamic, with new technologies being added as and when they are approved.

# Daikin and the ECA: What this means

As of 07/08/2001 the Government ratified the ECA scheme, with changes made to the Energy Technology list of qualifying technologies and criteria at each successive budget. Details of qualifying categories are available on the ECA website, [www.eca.gov.uk](http://www.eca.gov.uk).

At present Daikin have over 170 products listed under 3 categories. Extensive listings of all qualifying products can be found on [www.eca.gov.uk/etl](http://www.eca.gov.uk/etl)

#### Current Eligibility Criteria

Current eligibility criteria for individual categories are detailed on page 3. Minimum performance criteria levels for all categories will be adjusted every two years to increase the COP / EER levels.

The next revision date will be around August 2008.

### Heat Pumps and Refrigeration Equipment (Packaged Chillers)

Investments in heat pumps and packaged chillers can only qualify for ECAs if the unit or system is named on the Energy Technology List.

Eligible products are required to meet performance criteria for both heating and cooling.

The standard EN14511 is accepted for heat pumps. As this standard also forms the basis for testing to qualify for Eurovent, any equipment that is certified to Eurovent is deemed to meet the requirements for testing.

The qualifying rating criteria for heat pump split and multi split systems is that the minimum energy efficiency meets COP greater than 3.4 and EER greater than 3.0. These levels equate to Energy Label B.

The standards pr EN12055 (cooling) and EN255 (heating) are accepted for packaged chillers. The qualifying rating criteria varies dependant on the cooling mode, i.e. water or air-cooled, and whether the unit is cooling only or heat pump.

Tax Allowances for heat pumps and packaged chillers can include the following:

- Full cost of the system.
- Direct transportation and installation costs including crantage, project management costs, modifications to existing plant and machinery and commissioning.
- Professional fees but only if they are directly related to the acquisition and installation of assets that are plant or machinery. Fees incurred on such things as feasibility studies or design work are generally too remote from the acquisition and installation to qualify. The eligibility of such costs is a question of fact based on the particular circumstances of the case.
- Costs of alteration to an existing building arising as a direct result of the installation of the qualifying plant or machinery may be eligible.

### Air to Air Energy Recovery

Investments in energy recovery devices such as Daikin VAM units can only qualify for ECAs if the unit is named on the Energy Technology List.

The standard EN308 is accepted for air to air energy recovery. The qualifying criteria are based on a minimum effectiveness level, and a maximum levels for internal leakage and pressure drop.

Tax allowances for stand-alone air to air energy recovery units can include the following:

- Full cost of the equipment.
- Supply and installation of the heat exchanger.
- Cost of associated controls, fans and ductwork installed specifically for the purpose of energy recovery.

Tax allowances for air to air energy recovery units installed as part of an integrated air handling and ventilation system are based on the rated airflow capacity under balanced flow conditions, detailed below:

Device	Air Flow Rate m <sup>3</sup> /second	Claim value £/(m <sup>3</sup> /sec)
Plate Heat Exchangers	0-1	£1,800 (*see note)
	1-5	£1,560
	5-10	£1,440
	>10	£1,320

\* Note - for trickle ventilation ventilation units of individual flow rating less than 0.2m<sup>3</sup>/sec, which incorporates heat recovery, the full invoice value for supply, installation and consultancy fees will apply.

## The Key Features of the Scheme

- All businesses can claim Enhanced Capital Allowances on their qualifying expenditure regardless of size, industrial or commercial sector or location.
- Enhanced Capital Allowances permit the full cost of the investment in specified technologies to be relieved for tax purposes against taxable profits of the period of the investment.
- The qualifying technologies have to meet the published energy saving criteria. They are published in the Energy Technology Criteria List, where the criteria will be reviewed on an annual basis.
- Only investments in new and unused plant and machinery can qualify for ECAs.

## Claiming the Allowances

The ECAs are claimed in the same way as other capital allowances on the Corporation Tax Return for companies and the Income Tax Return for individuals and partnerships.

Neither the product nor the installation need to be provided with documentation to prove qualification for the Enhanced Capital Allowance provided the item is on the relevant Energy Technology Product List on the ECA website.

### Capital Allowances

Basic capital allowances are given at 25% of expenditure on capital equipment on a reducing balance basis. This means that you don't have to pay tax on 25% of the expenditure incurred when buying capital equipment. Small businesses qualify for a first year allowance, currently 40%, and 25% thereafter on the reducing balance basis.

Therefore on equipment costs of £1,000, the business reduces its taxable profit by £250 for the first year when expenditure is made.

The balance, £750, is taken forward to the next year. If the business is paying tax at 30% the first year saving is £75.

In the second year the business will receive a 25% allowance on the balance remaining i.e. £750. The value of the allowance in the second year is therefore the value of not paying tax on £187.50, which is £56.25.

The allowance is given on the remaining balance every tax year. After a period of ten years the allowance will have been claimed on approximately 95% of the total expenditure.

### Enhanced Capital Allowances

Enhanced capital allowances are given at 100% of the expenditure in the first year. This means that you don't have to pay tax on 100% of the expenditure incurred when buying qualifying capital equipment.

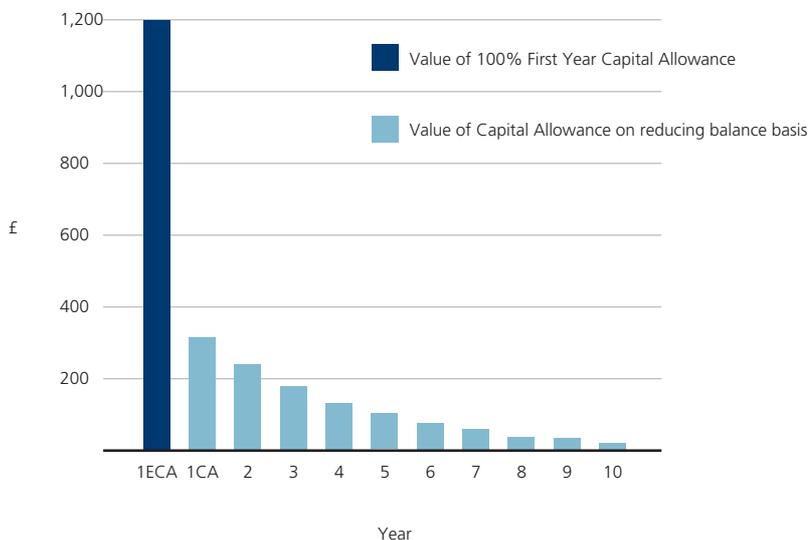
Therefore on equipment costs of £1,000, the business reduces its taxable profit by the full £1,000 for the first year when the expenditure is made. The first year saving from the ECA is £300, much greater than the standard capital allowance first year saving of only £75.

## Example

The calculations in the table below are for a large business that pays corporation tax at 30%. Smaller businesses will pay tax at a lower rate. The assumed installed value of the qualifying Heat Pump system is £4,000.

The example below details the effect of the Enhanced Capital Allowance on the qualifying Heat Pump system compared to a non-listed system of the same value.

	Capital Allowance	Enhanced Capital Allowance
Tax Rate	30%	30%
% of expenditure to which allowance applies	25%	100%
Equipment cost	£ 4,000	£ 4,000
Taxable amount reduced by	25% of £ 4,000 = £ 1,000	100% of £ 4,000 = £ 4,000
First year saving	30% of £ 1,000 = £ 300	30% of £ 4,000 = £ 1,200
Balance brought forward to second year	£ 4,000 - £ 1,000 = £ 3,000	£ 0
Taxable amount reduced by	25% of £ 3,000 = £ 750	£ 0
Second year saving	30% of £ 750 = £ 225	£ 0



### Electricity Suppliers

Some electricity suppliers are prepared to offer preferential rates for fixed term contracts, which offer savings over and above the increases of the CCL.

## How to Claim

You will be able to claim 100% first year capital allowance on the expenditure incurred if the item that has been purchased is on the Energy Technology Product List before or at the time that:

- a) you are contractually obliged to pay for the equipment;
- or
- b) you enter into a leasing agreement for the equipment.

The allowance can be claimed on the cost of the product, along with any costs that are directly associated with the provision of the product such as installation costs.

Wherever you are able to identify how much you have spent on qualifying equipment (for example from an invoice) you must use this as the basis of your claim.

For Variable Speed Drives then the claim values shown on the Energy Technology List should be used.

Remember to keep the relevant records for tax purposes e.g. take a dated screen-print of the Energy Technology List showing the qualifying product direct from [www.eca.gov.uk/etl](http://www.eca.gov.uk/etl).

ECAs are claimed as part of normal income/corporation tax return calculations - see your tax return form and accompanying notes.

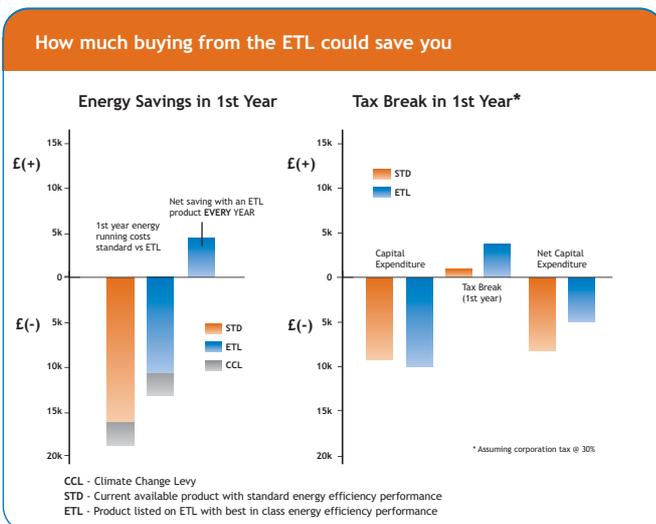


Diagram reproduced by kind permission of The Carbon Trust, 'Understanding the benefits of the Enhanced Capital Allowance', PFL188, 2005

## Benefits

Businesses that invest in the technologies that qualify for the enhanced capital allowances can obtain a significant cash flow boost because they receive tax relief for their investment much earlier than would otherwise be the case.

Importantly, technologies qualifying for an ECA are energy efficient and thus lead to significant long-term financial benefits in addition to the tax rebate. Businesses can benefit by investing in energy efficient technologies that reduce their energy costs and climate change impact.

As an example, in 2004 British companies spent about £250 million on energy efficiency and produced cost savings of about £600 million.

## Sources

There has been a lot of speculation as to what can actually be claimed for under the ECA scheme. In this document we have presented the facts as are taken from data provided by the Carbon Trust and the Inland Revenue.

## Energy efficiency

As well as the benefits that the ECA scheme has to offer, Daikin believes that the emphasis should be on the efficiency and quality of the system, to keep the running costs low and the reliability high.

“Daikin’s superior build quality, reliability and innovation places them firmly at the forefront of air conditioning technology”

## Benefits of choosing DAIKIN

- Pioneers of Inverter Drive technology in VRV, Split, Sky and Super-Multi ranges of equipment, with energy savings of up to 70% on conventional non-inverter systems.
- Offering the most sophisticated DX controls packages in the market.
- Optimisation of equipment to maintain high COP and EER.



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### Further Information

More information can be obtained from the following websites:-

[www.thecarbontrust.co.uk/energy/pages/home.asp](http://www.thecarbontrust.co.uk/energy/pages/home.asp)

[www.inlandrevenue.gov.uk](http://www.inlandrevenue.gov.uk)

[www.eca.gov.uk](http://www.eca.gov.uk)

For an overview of the financial implication to businesses, a CCL calculator is available on the internet site;

[www.amcho.com/climate-change-levy.htm](http://www.amcho.com/climate-change-levy.htm)

The DEFRA Energy Efficiency Best Practice Programme  
Help line is: 0800 585794