

**Corporate Energy Use Plan**

**“Waverley will be exemplary in its efficient use of energy”**

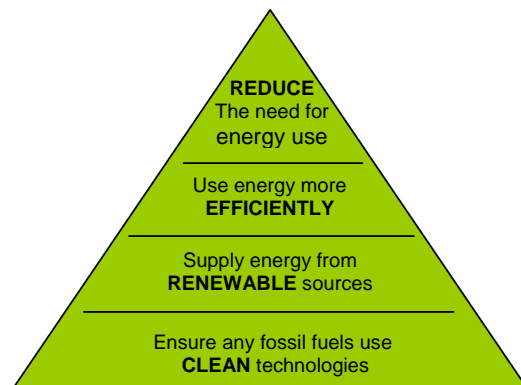
**Objectives**

- ❑ To protect the environment.
- ❑ To avoid unnecessary expenditure.
- ❑ To improve cost- effectiveness, productivity and working conditions.
- ❑ To set the example to our community on energy conservation.
- ❑ To reduce the use of fossil fuels.

**This will be achieved by:**

- ❑ Setting a benchmark for improvements in energy efficiency within Waverley’s own corporate buildings. Actions will concentrate on The Burys initially where most consumption occurs.
- ❑ Developing the capacity of Waverley’s staff to reduce the impact of their energy use.
- ❑ Leading by example in using renewable energy and specify the use of renewables within Waverley’s policies, where possible.
- ❑ Implementing the **energy hierarchy** in all areas of Waverley’s operations.

Proposed by the Local Government Association in 1999, supported by the Environment Audit Committee and adopted by a range of partners  
**The Energy Hierarchy.**



## Draft

### **An Energy Use Plan will help Waverley deliver:**

- Corporate Plan – Waverley has committed to contribute to tackling climate change while delivering value for money.
- Nottingham Declaration – Waverley made a commitment to act on Climate Change.
- Display Energy Certificate – Waverley is required to display a certificate on the energy efficiency of the building and have an energy management action plan.
- National Indicator NI185 – To achieve CO2 reduction from local authority operations.

### **Baseline and Target**

In 2007/2008, about 465.82 tonnes of CO2 were emitted from electricity and gas consumption at the Burys. This equates to around 1.3 tonnes per year per FTE.

The figures below give an indication of the energy consumption pattern throughout the year 2007/2008. Whilst the gas consumption fluctuates with weather patterns and seasons, electricity seems to be consumed in a more stable manner. A variation during the summer months would have been expected with increased daylight and more officers on leave during those months.

Information Technology (IT) is a substantial contributor to the electricity consumption and efforts are being made to isolate its consumption from the rest of energy intensive activities and measure the improvements separately.

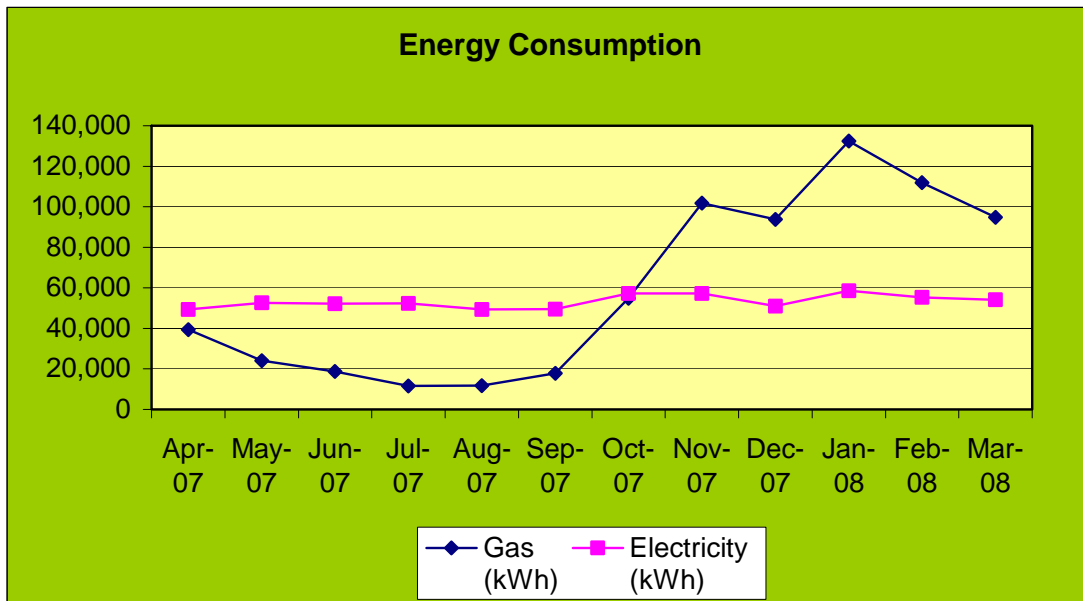
A provisional target of 3% reduction in total CO2 emissions will be achieved year on year. This will relate to calendar years to coincide with NI185 reporting.

# Draft

**Figure 1.** Waverley's energy consumption and CO2 emissions for year 2007/2008 (Note: data in figure 1 and 2 do not yet include electricity consumption in the Annex building)

Date	Gas (kWh)	Electricity (kWh)	Gas (kg of CO2 )	Electricity (kg of CO2)	Climate Change Levy (£)
Apr-07	39,441	49,315	7,296.59	25,791.75	£277.00
May-07	24,089	52,654	4,456.47	27,538.04	£269.00
Jun-07	18,769	52,111	3,472.27	27,254.05	£257.00
Jul-07	11,606	52,309	2,147.11	27,357.61	£247.00
Aug-07	11,693	49,374	2,163.21	25,822.60	£235.00
Sep-07	17,814	49,454	3,295.59	25,864.44	£245.00
Oct-07	54,891	57,201	10,154.84	29,916.12	£336.00
Nov-07	101,839	57,276	18,840.22	29,955.35	£408.00
Dec-07	93,793	50,909	17,351.71	26,625.41	£368.00
Jan-08	132,362	58,574	24,486.97	30,634.20	£466.00
Feb-08	111,909	55,230	20,703.17	28,885.29	£415.00
Mar-08	94,750	54,074	17,528.75	28,280.70	£384.39
<b>Total</b>	<b>712,956</b>	<b>638,481</b>	<b>131,896.86</b>	<b>333,925.56</b>	<b>£3,907.39</b>

**Figure 2.** Energy Consumption 2007/2008



# **Draft**

## **Action Plan**

The Action Plan below sets out the areas of activities, proposed actions, timescales and indication of costs/savings where available. The Climate Change Officers Group has come up with those actions after identifying that energy use within the offices should be a priority for Waverley to manage and reduce. Further actions, efficiencies and Improvements will actively be sought.

## **Promotion and Communication**

Raising the profile of issues such energy conservation is significant in order to increase awareness and change behaviour. The Green Advocates is an initiative that aims to actively involve people that have genuine interest in energy efficiency and to motivate and encourage others. Energy Saving Week in October 2007 was also an awareness raising exercise for Waverley staff and similar event will be organised more regularly. Frequent awareness raising campaigns are key to changing habits and behaviour and make individuals energy conscience.

## **Monitoring and Reviewing**

This plan will be reviewed annually to assess achievement of the target and report the progress and completion of existing actions. New actions will also be set as part of the reviewing process.

## **Reporting on Action Progress**

Progress update and target achievement will be reported to Corporate Management Team and the Executive upon completion of annual review.

# Draft

## Action Plan

Challenge	Actions	Time scale	Progress	Cost	
Identify possible areas of improvement-in housekeeping.	Energy use assessment to be done by Green Advocates <sup>1</sup> .	September 2008	Assessment form has been supplied. Results to be gathered.	Saving: Likely to be low	
Reduce consumption from IT	Replacing new PCs with more energy efficient units (Thin Clients)	Ongoing	Linked to a rolling programme to renew PC's	Saving: Low start increasing with roll -out.	
Reduce consumption from IT	Virtualisation project - Replacing existing 46 computer servers with fewer, more energy efficient ones.	2009-10	More detailed report to be presented to the Executive in due course.	Saving: Not yet identified.	
Restricted budget for energy efficiency improvements	Ensure office buildings are on green energy tariff, which makes savings from not paying the climate change levy. Savings can be reinvested on energy efficiency measures.	From September 2008	Energy tariff review in September 08. Proposal to be developed 2 <sup>nd</sup> half of 2008.	Saving: £4000 per year (See figure 1) Cost: From approved capital programme provision	
Energy and money savings - Lights being left on in unoccupied rooms, use of kettles.	Install occupancy sensors in toilets and meeting rooms. Review hot water provision.	1 year	Feasibility is taking place at the moment	Saving: Low start increasing with roll -out. Cost: From approved capital programme.	
Energy and money savings - Coffee machines left on all night and weekends	Investigate energy consumption of coffee machines and invest in timers for turning on/off.	December 2008	Investigation complete. It was estimated that by switching the machines off at night and during the weekend would save 2184 kWh / year.	Saving: £190 year net	
Monitoring process to be set	Establish a CO2 monitoring process	March 2008	Defra spreadsheet now published.		

<sup>1</sup> Green Advocates is an initiative that was launched in December 2007. Approximately 45 Waverley volunteers signed up to motivate and encourage colleagues to adopt a more sustainable approach to work, set the example and actively help top make Waverley a greener workplace.

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Challenge	Actions	Time scale	Progress	Cost
up to measure performance – Need in order to deliver NI185.	to deliver NI185 (CO2 reduction from LA's operations)		Internal date collection systems now also needed.	Cost: From approved staffing resources.
Progress Carbon Reduction Management Programme Plan (2007)	Continue working on the actions suggested by the Carbon Reduction Management action plan.	Ongoing	In progress. Refer to annexe 3 for progress update.	Commitment to NI186 could bring financial rewards through LAA rewards process.
Behavioural change - Promotion and information	<ul style="list-style-type: none"> <li>a) Publish energy consumption to staff on a year-to-year comparison basis.</li> <li>b) Explore possibilities of displaying live energy consumption in public areas.</li> <li>c) Energy Saving Week</li> </ul>	<ul style="list-style-type: none"> <li>a) 1 year – ongoing</li> <li>c) November 2008</li> </ul>		<ul style="list-style-type: none"> <li>a) Cost: None identified</li> <li>b) Cost: from within approved revenue budget</li> <li>c) Cost: None identified</li> </ul>
Behavioural change - Education for staff	<ul style="list-style-type: none"> <li>a) Establish an energy efficiency staff-training program on induction.</li> <li>b) Provide more specific energy awareness-fuel poverty training for staff with relevant public contact.</li> </ul>	1 year	<ul style="list-style-type: none"> <li>a) Basis energy efficiency training as part of staff induction to be organised.</li> <li>b) Initial considerations have been given. In process of identifying appropriate groups of staff</li> </ul>	<ul style="list-style-type: none"> <li>a) Cost: None</li> <li>b) Cost: £2000 (from approved training budget)</li> </ul>
Requirement to present Energy Display Certificate	Produce an Energy Display Certificate and make year on year improvements.	October 08 - ongoing	Certificate required by October 2008 and renewed annually.	Cost: Any costs will be contained within approved budget.

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Challenge	Actions	Time scale	Progress	Cost	
Need to promote the use of renewable – low carbon energy	Investigate the options for boiler replacement at the Bury's.	1-3 years	Further feasibility study with cost implications is being undertaken.	Saving: identified in report to the Executive in July 2008.	

Comms/exec/2008-09/047