

REPORT TO: Corporate Services Policy and Performance Board
DATE: 6th January 2009
REPORTING OFFICER: Strategic Director Environment
SUBJECT: Carbon Strategy Implementation Plan – Progress Report
WARDS: Borough-wide

1.0 PURPOSE OF THE REPORT

1.1 To report on progress on the implementation of activities contained in the Carbon Management Strategy and Implementation Plan.

2.0 RECOMMENDATION: That

- (1) the progress on implementing activities in the Carbon Strategy be noted; and**
- (2) the Strategy be reviewed in early 2009**

3.0 SUPPORTING INFORMATION

3.1 During 2007/08 the Council participated in the Carbon Trust's Local Authority Carbon Management Programme. The aim of the programme was to establish a baseline from which future emissions could be measured and set the Council on a path of changing our current practices over the short to medium/long term ensuring that carbon emissions are considered in decision making processes. As part of the overall Strategy the Council committed to implement a range of measures that would lead to cost and emission reductions. Current projects aimed to implement measures by 20% over the 5 year life time resulting in savings in excess of £400,000 and 4891 tonnes of carbon by 2012/13

3.2 Carbon Baseline

The baseline for 2006/07 included carbon emissions from Council buildings, schools, street lighting, fleet transport, business travel and waste.

The table below is a summary of the emissions for 2006/07

Halton Borough Council	2006/07
Total Tonnes of CO ² emissions	24,190
Total Energy and Fuel Costs	4,259,000

The table below provides a breakdown of the total CO² emissions and costs.

Emissions Area	Cost £	% Overall	CO₂	% Overall
Buildings	£1.1m	26%	6,486	26.6%
Schools	£1.2m	27%	10,960	44.8%
Fleet Transport	£0.3m	7%	1,256	5.1%
Business Miles	£0.8m	19%	645	2.6%
Street Lighting	£0.8m	19%	4,835	19.8%
Waste			279	1.1%
	£4.20m		24,461	100.00%

Similar data has been collected this year and the position for 2007/08 is as follows

Halton Borough Council	2007/08
Total Tonnes of CO ² emissions	21,485
Total Energy and Fuel Costs	4,205,902

Emissions Area	Cost £	% Overall	CO₂	% Overall
Buildings	1.0m		6715	31
Schools	1.4m		7544	35
Fleet Transport	0.3m		1223	6
Business Miles	0.7m		537	3
Street Lighting	0.8m		5179	24
Waste			279	1

* The reduction in carbon from 06/07 is not as high as there was an initial error in the baseline for oil.

3.3 Progress with implementation

(a) Installation of powerperfectors

The Power Perfector's main feature is its ability to optimise and improve the source of voltage for a whole site and therefore cut energy consumption and costs.

A Power Perfector unit has now been installed at Kingsway Learning Centre and further units will shortly be introduced at The Brindley, Corporate Training Centre and Municipal Building. The total cost of installing Power Perfectors in these buildings is £60,000 and this will result in annual revenue savings of £26,500.

There are plans to roll out Power Perfectors to Halton Stadium, Widnes Market, Waterloo Business Centre, Rutland House, Runcorn Town Hall, Picow Farm, Widnes and Halton Lea Direct Links and Oak Meadow. The cost of installation in these buildings will be £153,000, which will result in annual revenue savings of £40,000.

(b) Energy Efficient measures at the Stobart Stadium Halton

Funding of £49,000 was allocated to Halton Stadium to undertake a programme of works to improve lighting, heating and water controls. The works have now been completed.

In 2006/07 the Stadium used 1,310,899 kwh of electricity at a cost of £94,307. In 2007/08 the number of kwh reduced by 174,381 kwh to 1,136,518 kwh. The reduction was due to a combination of the technical works and a pro-active energy campaign undertaken by staff. Electricity costs at the Stadium in 2006/2007 were £94,307. Costs for 2007/08 were £87,994.48, a saving of £6,313. The saving has to be seen in the context of rising energy prices and would have been greater if costs had not increased substantially. Reduction in consumption amounts to 13.3%.

(c) Energy Efficient measures in Runcorn Town Hall

A range of energy saving measures were incorporated into the refurbishment of Runcorn Town Hall. These included increased insulation at the roof level, double glazed window units and cladding panels are being used, alongside solar shading, photovoltaic panels and movement-sensitive lights inside.

(d) Energy Awareness Campaign

An Energy Campaign has been designed and a network of officers across the Municipal Building, Rutland House, Halton Lea Library, Warrington Road Children's Centre, Halton Stadium and four primary schools has been established. The Carbon Trust trained the network in early October 2008 and the campaign was launch the week commencing 20th October to coincide with the Energy Saving Trust's National Campaign on Energy Awareness. The Carbon Trust estimate that energy consumption can be reduced by between 5% and 15% through good housekeeping. If the Council

can target a 10% reduction in energy due to staff awareness, this could achieve a saving of in excess of £20,000 per annum based on current prices.

(e) Multi Functional Devices

An audit of the Council's fleet of photocopiers and printers identified that the Council had in excess of over 400 devices in its main buildings. Predominantly these printers were stand-alone and the aim of the project was to develop a print solution that took advantage of networked multi-functional devices (MFDs) and reduce the number of printers within the Council. The project will see a networked solution for MFDs across the following buildings: –

- Runcorn Town Hall
- Municipal Building
- Catalyst House
- Midwood House
- John Briggs House
- Rutland House
- Grosvenor House

Phase 1 of the project (Runcorn Town Hall) is now complete in terms of installation but further work is required to install the Equitrac Print solution. A project plan is in place to roll out the MFDs to the other buildings over the coming months. The project will see the fleet printers and photocopiers in those buildings reduce from in excess of 400 to 103.

Funding of £60,000 was allocated from the Invest to Save budget. This was primarily to fund additional server capacity to run print software. To date, £8,486 has been committed for the work at Runcorn Town Hall. There still needs to be an IT solution to allow the Equitrac Print system to operate on the Citrix system and this will require some additional software. Further servers will be required as the programme is rolled out to other buildings.

At Runcorn Town Hall, the Council is currently saving approximately £900 a month on monthly lease and service costs compared with the previous solution. Once the contract is fully rolled out, it is anticipated that a saving in the region of £2,000 - £2,500 per month (£25,000-£30,000 per annum) will be achieved on lease and service costs.

Consumables are included under the current contract. To date, savings of £10,300 have been achieved at Runcorn Town Hall from reduced cartridge orders. As the contract rolls out this is expected to increase to approximately £90,000 per annum.

The Equitrac system which enables the Council to monitor printing patterns could lower costs by a further 10 -15% within Runcorn Town

Hall and will be replicated throughout the majority of the Council's estate. This will be created mainly by improved control of colour usage and investigation of users' outputs with a view to redirecting large jobs to the Print Room, which has lower print costs.

The new devices have default settings to mono and duplex printing. Over time this should reduce the volume of paper used. In addition, the new devices are more energy efficient and in addition to using less devices this will result in an electricity consumption saving. A saving will also result now that the Council does not need to replace stand-alone printers. At this stage it is difficult to quantify exact figures for those savings.

(f) Vehicles

A 5% mix in bio fuels has been introduced into the vehicle fleet and the car leasing scheme now contains a limit of vehicles of 200g CO2/khm

(g) IT Initiatives

Virtualising the 37 servers to 4 has saved approx 99 tons of carbon and 244,521 KW of energy.

Switching from a CRT monitor to a TFT could save around £13 a year in energy running costs as a TFT uses around 50% less energy. We are only purchasing TFT monitors and as CRT's are replaced further carbon savings will be realised. This table shows the numbers of monitor types from July 2007 and now.

Display	Number (July 2007)	Number (December 2008)
CRT	708	325
TFT	1282	1813
TOTAL	1990	2138

Buying Dell laptops use the latest Intel Core 2 Duo processors offer 30% better performance while using 40% less power compared with previous Intel chips.

(h) Programme of energy improvements in buildings

A programme of works to replace oil boilers with gas, roof insulation and double glazing in schools and Council buildings has been completed.

(i) Building Schools for the future

Initial discussions have taken place with the BSF team to ensure that energy efficient measures are included in the redesign proposals for

schools. Initial suggestions that will be included in the Council's business case will be a building management system to maximise the efficiency of heating and ventilation, zoning to allow the partial building usage, sensory lighting, real time readouts of energy, water consumption and carbon output with indicators of targets to be reached, waste reduction and green computing.

(j) Electricity Contracts

As part of the new electricity contracts the Council has built in the purchase of electricity from combined heat and power sources.

3.4 Next Steps

It is intended to review the Strategy early in 2009 to seek progress against those actions not yet underway and to examine further opportunities for inclusion in the Plan

4.0 POLICY IMPLICATIONS

The above actions are in line with the Council's Carbon Management Strategy and Implementation Plan, which was drawn up as part of the Council's involvement in the Local Authority Carbon Management Programme.

5.0 OTHER IMPLICATIONS

The Council spends in excess of £1m per annum on energy costs in buildings. In the past 12 months prices have been extremely volatile and substantial increases are anticipated when the new gas and electricity contracts are negotiated. The current gas contract expires on 31st March 2009 and current predictions are the Council can expect a 75% increase in costs over the next two-year period. In terms of electricity the Council has two supply contracts. The first a half hourly contract which covers larger buildings. This is a one-year contract and expires on 30th September 2008. The current prediction is that there will be an increase of 101% on current costs. The Electric Sub 100kw contract expires on 31st March 2009 and current predictions are that prices will increase by 75% over the next two years. These increases would add substantially to the Council's existing costs and across all contracts could add approximately £800,000 to the existing contracts.

Any action the Council can take to reduce energy consumption will help to reduce pressure on these budgets.

6.0 IMPLICATIONS FOR THE COUNCIL'S PRIORITIES

There are no direct implications for the Council's priorities although reducing spend on energy can help direct resources to frontline services.

6.1 Children and Young People in Halton

Leadership shown by the Council can promote an awareness of climate change and energy efficiency issues amongst young people.

6.2 Employment, Learning and Skills in Halton

Following the example of the Council business will effect savings in energy making them more competitive and potentially enabling additional resources which can be directed for business investment and training.

6.2 A Healthy Halton

Reducing vehicle journeys will have a small beneficial effect in the overall air quality by encouraging healthy lifestyles through walking, cycling and using more public transport.

6.3 A Safer Halton

A reduction in the dependency in car travel can help reduce road traffic accidents.

6.4 Halton's Urban Renewal

An opportunity can be taken through the planning process to encourage greater sustainability across the built environment.

7.0 RISK ANALYSIS

The long term failure to actively manage carbon emissions could lead to financial penalties if the Government proceeds with its proposals for a mandatory capping scheme.

8.0 EQUALITY AND DIVERSITY ISSUES

None

9.0 LIST OF BACKGROUND PAPERS UNDER SECTION 100D OF THE LOCAL GOVERNMENT ACT 1972

9.1 None