

Appendix A

Carbon Management Plan Project Progress 2011-12

1. Existing projects

Project	Status	Date	Comments	Capital Cost	Predicted annual savings		Implemented annual savings		Actual tCO2 saved to 31/03/12
					tCO2	£	tCO2	£	
Alsager Leisure Centre - fitness suite controls	Not implemented		Project not gone forward	£400	5.29	£875	-	-	-
Alsager Leisure Centre - various lighting controls	Implemented	28/09/2010		£4,044	9.58	£1,585	9.20	£1,585	13.8
Congleton Leisure Centre - AHU controls	Implemented	08/11/2010		£8,977	17.87	£2,914	20.00	£3,000	28
Congleton Leisure Centre - pool cover	Implemented	06/09/2010		£14624	52.57	£8,571	57.10	£8,092	89.56
Congleton Leisure Centre - voltage optimisation	Implemented	30/04/2011		£12,165	31.03	£5,134	29.70	£5,008	27.23

Congleton Leisure Centre -sports hall lighting controls	Implemented	2009/2010*		£1,809	9.06	£1,499	8.70	£1,500	17.4
Crewe Pool - burner controls	Implemented	02/09/2010		£3,000	26.71	£4,356	29.00	£4,286	20.26
Crewe Pool - pipe insulation	Implemented	17/03/2011		£2,200	14.35	£2,340	14.20	£2,130	14.75
Crewe Pool cover	Implemented	22/02/2011		£7,840	2.68	£437	2.90	£4,300	3.19
Dalton House - meeting room light switches	Implemented	2009/2010*		£1,120	2.39	£396	2.30	£400	4.6
Delamere House - boiler controls	Implemented	06/04/2010		£5,769	25.00	£4,075	27.20	£4,013	53.92
Delamere House - heating pipework insulation	Not implemented		Project not gone forward	£4,000	14.11	£2,335	0.00	-	0

Holmes Chapel Leisure Centre - lighting controls	Implemented	05/10/2010		£4,259	12.50	£2,068	12.00	£2,066	17.82
I2S projects package - completion of I2S 2010/11	Implemented but not achieved predicted savings	2010/2011	1 additional project delivered in the 10/11 ItS beyond those identified separately in the CMP	£200,000	272.00	£45,000	0.00	£2,088	12.1
Knutsford Leisure Centre - sports hall lighting controls	Implemented	14/01/2011		£4,095	16.59	£2,745	15.90	£2,500	19.25
Macclesfield Leisure Centre - power factor correction	Implemented	2009/2010		£3,327	0.00	£4,380	0.00	£4,380	0
Macclesfield Leisure Centre - Voltage optimisation	Implemented	2009/2010*		£26,997	84.12	£13,917	80.40	£10,546	160.8
Macclesfield Town - boiler controls	Implemented	2009/2010*		£5,481	12.27	£2,000	13.30	£2,000	26.6
Macclesfield Town - boiler controls addition	Implemented	2009/2010*		£1,400	2.76	£450	3.00	£450	6.0

Macclesfield Town Hall - 1st floor lighting controls	Implemented	2009/2010*		£17,688	60.44	£10,000	57.80	£10,000	115.6
Macclesfield Town Hall - 2nd floor lighting controls	Implemented	28/05/2010	Costs and savings incorporated with Macc Town Hall ground floor corridor lights project below	£8,900	21.76	£3,600	-	-	-
Macclesfield Town Hall - ground floor corridor lights	Implemented	28/05/2010		£20,110	37.43	£6,193	35.80	£6,193	59.67
Macclesfield Town Hall - voltage optimisation	Not implemented		Project not gone forward	£26,878	84.12	£13,917	-	-	-
Macclesfield Town Hall refurbishment scheme	Implemented	11/11/2011		£40000	28.29	£4,680	41.60	£8,000	16.03
Macclesfield Leisure Centre - various areas lighting	Implemented	2009/2010*		£3,772	9.28	£1,535	8.90	£1,340	17.8
MCL - variable speed drives	Implemented	10/02/2011		£7,070	38.01	£6,289	36.30	£5,590	41.31
Middlewich Library - lighting and controls	Implemented	17/09/2010		£2,000	3.29	£544	3.10	£649	4.76

Municipal Building Crewe - data centre survey/ amendments	Implemented	10/12/2010		£2,600	37.05	£6,129	35.40	£6,596	46.19
Municipal Building Crewe - lighting controls	Implemented	11/02/2011		£5,400	22.63	£3,744	21.60	£1,748	24.52
Nantwich Civic Centre - loft insulation	Implemented	27/09/2010		£6,179	3.79	£618	4.10	£633	6.15
Nantwich Pool - burner controls	Implemented	02/09/2010		£3,000	41.85	£6,823	45.50	£6,750	68.09
Nantwich pool - pipe insulation	Implemented	07/01/2011		£4,244	12.86	£2,096	29.50	£4,660	36.28
Poynton Leisure Centre - lighting controls	Implemented	30/03/2011		£1,177	5.66	£936	5.60	£976	5.62
Poynton Leisure Centre - pool cover	Implemented	2009/ 2010*		£10,142	20.73	£3,381	22.50	£3,380	45
Poynton Leisure Centre - pool temperature controls	Implemented	31/01/2011		£903	28.23	£4,670	10.40	£1,416	12.13

Pyms Lane - voltage optimisation	Implemented	28/05/2011		£13006	24.25	£4,012	32.80	£6,000	27.35
Sandbach Leisure Centre - light and heater controls	Implemented	24/02/2011		£1,420	2.23	£370	2.80	£474	3.08
Shavington Leisure Centre - fan controls	Implemented	06/12/2010		£365	0.50	£82	2.00	£350	2.63
Shavington Leisure Centre - sports hall lighting controls	Implemented	08/10/2010		£1,548	6.03	£998	5.80	£998	8.57
Shavington Leisure Centre - store room lights	Implemented	06/12/2010		£446	0.60	£100	2.30	£400	3.03
Westfields Offices - a/c units linked to light controls	Implemented	09/11/2010		£18,674	29.00	£4,797	5.80	£4,797	8.07
Wilmslow Leisure Centre - various lighting controls	Implemented	2009/2010*		£3,626	9.70	£1,605	9.30	£1,340	18.6

Wilmslow Leisure Centre - voltage optimisation	Implemented	26/10/2010		£14,876	38.83	£6,424	37.10	£5,004	52.56
TOTAL TO 31/03/2012				£525,531	1177.44	£198,620	780.9	£135,638	1138.32

* for 2009/10 projects, exact implementation dates are not available so two years worth of tCO2 savings are assumed to 31/03/12

2. Planned projects

Project	Status	Date	Comments	Capital Cost £	Predicted annual savings		Implemented annual savings		Actual tCO2 saved to 31/03/12
					tCO2	£	tCO2	£	
Adopt new car lease scheme	Implemented	11/2011	60 vehicles purchased since November launch. Average saving 34.25 g CO2/km per vehicle.	£10,000	49.9 (over 3 years)	£26,016	17.08	£-	2.125
Fleet review	Ongoing	03/2011	Reductions in the number of vehicles achieved through completing a fleet review. Telematics installed in half of the waste vehicles in the North. EST Motorvate scheme no longer available due to govt cuts in funding.	£286,000	572.49 (over 3 years)	£283,322	73 ¹ (09/10) & 263 ¹ (10/11)	£-	336 ¹

<p>Good Housekeeping strategy: personal responsibility (assumed 10 per cent reduction in electricity use)</p>	<p>Ongoing</p>	<p>03/2011</p>	<p>Network of Eco Reps established. Staff events held around energy, climate change and smarter driving techniques. Two staff surveys on climate change. Corporate building energy use has reduced around 10% on average, though difficult to attribute to specific factors beyond technical measures. Need to develop performance measure.</p>	<p>£20,000</p>	<p>136</p>	<p>£41,400</p>	<p>-</p>	<p>£-</p>	<p>-</p>
<p>Green ICT strategy</p>	<p>Ongoing</p>	<p>03/2011</p>	<p>Almost 500 energy efficient PCs have replaced existing equipment. Server rationalisation to date is yet to show a marked effect on energy consumption at these sites. Partial problems with accurate meter readings at these sites. Need to develop performance measures.</p>	<p>£900,000</p>	<p>326.40</p>	<p>£54,000</p>	<p>9.44</p>	<p>£-</p>	<p>9.44²</p>
<p>Review of staff travel rates and hierarchy</p>	<p>Ongoing</p>	<p>11/2011</p>	<p>New casual user rates introduced in Nov 2011. Figures for staff travel in 5 months available since changes indicate a reduction in mileage by 6.6% (26,885 miles) in those months. However, a full 12 months data is required to give a</p>	<p>£10,000</p>	<p>300.64</p>	<p>£156,974</p>	<p>0.00</p>	<p>£-</p>	<p>8.8³</p>

			reliable calculation. Need to improve accuracy of data collection in grey fleet. Need to promote a travel hierarchy. Video conferencing facilities introduced but not well used.						
School engagement and awareness	Ongoing	03/2011	Engagement with schools in carbon management is an ongoing process. Two programmes have been launched to schools; the Junior Energy Monitor Scheme (JEMs) and the Collaborative Low Carbon Schools Programme. 65%, or 80 Primary Schools, now have JEMs. Some participating schools are reporting savings of up to 8.5% on electricity consumption but information is patchy and varied. More robust performance measures for this project are being developed for 11-12. A pilot of the CLCSP was successful in 2010-11. Working with 10 schools measures were identified that have the potential to achieve approx 13% savings on energy consumption and	£10,000	3206.90	£528,000	0.00	£-	

			CO2. Reportable figures will only be available after 12 months of implementation. However, the global picture for CE schools in 2011-12 is that consumption continues to increase in both gas and electricity. A better understanding of the reasons behind these figures is required if target is to be achieved.						
Illuminated Traffic Signs - selected switching off based on 400 units per year	Superceded	By 03/2013	This project has developed into one of full replacement of all traffic signal lamps with LEDs. It is now projected to achieve savings of 262 tCO2 pa. A proposed strategy for the delivery of the scheme has been developed and subject to full member approval, work will commence over the summer months. This project will be part funded through a successful Salix application. Confirmed savings figures will only be available once energy data reviewed after completion.	£30,000 £637,000	163.20 262	£27,000 £42,000	0.00	£-	

Street Lighting - Dimming of main road lights based on 600 units per year	Superceded	06-10/2012	These projects have been reviewed and developed into three street lighting initiatives to be undertaken within one scheme. Three trials have been implemented to aid the development of a strategic approach (funded 2011/12).	£450,000	380.80	£63,000	0.00	£-	
Street Lighting – selective reduced lighting hours in residential areas based on converting 3,000 units per year	Superceded	06-10/2012	A £2 million project combining street lighting removal, dimming & part night lighting will deliver predicted carbon savings in the region of 1904 tCO2 pa. A proposed strategy for the delivery of the scheme has been developed and subject to Scrutiny & full member approval, work will commence over the summer months. Confirmed savings figures will only be available once energy data reviewed after completion.	£350,000 £2 million	1360.00 1904	£225,000 £288,000	0.00	£-	
Waste and Recycling: scheme harmonisation etc	Ongoing	03/2011	A single co-mingled recycling scheme was introduced in phases to October 2011. In the first year of operation, recycling has been increased by 7,781 tonnes (9.3%) on the previous year. Figures indicate a potential saving of	£1.25 million	894.00	£234,000	0.00	£-	

			8,525 tCO2 to 2016 but need to be confirmed.						
TOTAL TO 31/03/2012									356.37

1. Based on CO2 savings achieved in reduced fuel consumption by CEC fleet between 2010 - 2012.
2. Based on kWh savings as a result of replacing 216 desktops and 282 laptops in 2011-12.
3. Based on savings in CO2 emissions from reduction in staff mileage.

3. Medium/long term projects

Project	Status	Date	Comments	Capital Cost £	Predicted annual savings		Implemented annual savings		Actual tCO2 saved to 31/03/12
					tCO2	£	tCO2	£	
Property rationalisation - assumed savings in electricity and natural gas	Ongoing	03/2011	Rolling programme of property reviews in place. 8 buildings sold.9 buildings currently in affordable housing programme.7 buildings held for regeneration purposes.17 buildings subject to review/consultation.30+ properties that are currently in the process of being devolved to T& P Councils. Need to	£100,000	1521	£250,000			1037*

			ensure accurate data available for properties in disposal programme so that savings can be accurately captured.						
Property rationalisation - assumed savings in burning oil	Ongoing	03/2011	This project has been combined with the one above.	£10,000	49	£6,000			
TOTAL TO 31/03/2012									1037*

* Figure to December 2011

TOTAL SAVINGS TO 31/03/2012 FROM EXISTING, PLANNED AND MEDIUM/LONG TERM PROJECTS = 2531.99 tCO2