# **ESSENTIAL REFERENCE PAPER"B**"

East Herts Council

## Annual Review of Progress East Herts Climate Change Action Plan September 2014

### Introduction:

Members will recall that the Council adopted the Climate Change Strategy and Action Plan in December 2009. At the meeting of the Environmental Scrutiny Committee held in June 2013 members requested that a report be brought to a meeting of the Committee in September 2014 detailing work achieved in implementation of the Action Plan since its adoption at the end of 2009. This report summarises the work achieved to date (December 2009- April 2014) in implementing actions within the Action Plan. Officers believe that much work has been achieved over the past two years and that significant savings, based on 2009 baseline data, have been achieved in carbon dioxide emissions, as detailed in the report update below.

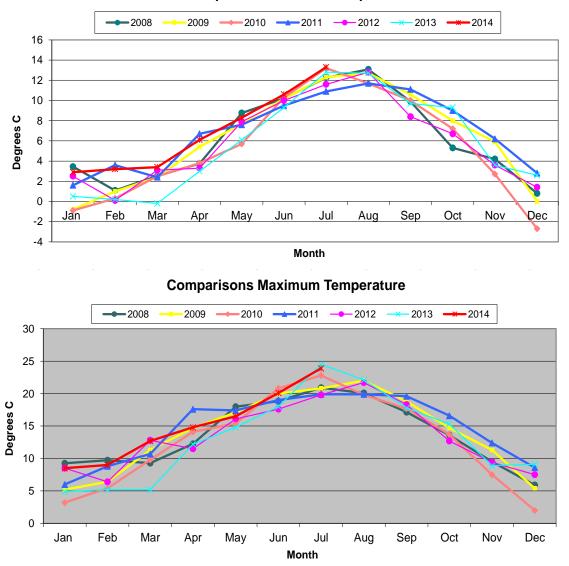
It should be noted that all agreed initiatives within the Action Plan with financial implications were/are subject to a business case analysis before implementation to ensure value for money.

### Carbon Savings:

Clearly the main purpose of the Climate Change Action Plan is to reduce the Council's overall carbon emissions relating from its operations and delivery of services. Many energy efficiency measures have been adopted by the Council, which have resulted in direct carbon dioxide reduction, as well as financial savings due to decreased energy use. Both the carbon emissions and financial savings will continue to accrue over time, particularly with the ongoing increase in fuel costs. However, bottom line carbon dioxide savings have been tempered by a number of factors in that time. Chiefly these equate to weather conditions, we have seen several longer and colder than average winter temperatures as well as cooler summers (figures 1 & 2 below refer). Although this last winter 2013/14 has been significantly milder and wetter than the norm and for example at Wallfields this has contributed to a decrease in use of heating gas resulting in a carbon emissions figure of 16% less than 2012/13 (see weather graphs below).

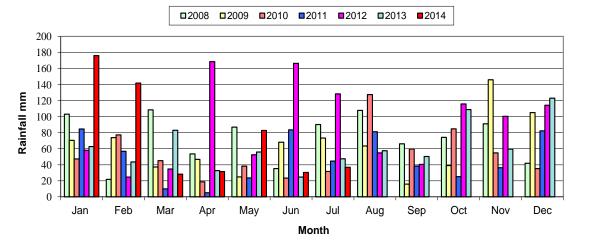
Secondly, over the past few years there has been considerable staff reorganisation, with more staff working from Wallfields leading to increased energy use in that building and additional staff joining the Council form Stevenage.

Thirdly, service activity has increased during the period of the Action Plan, requiring an increased use of energy. Thus we have seen increased use of the Hertford Theatre, significant changes to recycling/waste collections services; and, a near doubling of visitor numbers using East Herts leisure facilities over the last 4 years. However, as is noted in the accompanying report the energy efficiency measure undertaken at Hertford Theatre and the Leisure centres have made a large impact in negating increased energy use. Similarly the new waste contract and recent further organisation to the waste rounds last year has meant that despite increase service provision  $CO_2$  emissions by the recycling /waste collection service have fallen by a total of some 27% between 2008/09 and 2013/14.



#### **Comparison Minimum Temperature**

**Comparison Rainfall** 



## Hertford Weir Micro Hydro Project:

Members will be aware that the Executive initially agreed a business case for the installation of a micro hydro scheme at Castle Weir, Hertford in December 2010. Subsequently, in 2012, the Executive agreed a revised business case to reflect the additional requirements of the Environment Agency, with funding included in the current capital programme. Since then further ongoing negotiations have been taking place with the Environment Agency. Initially concerns were expressed by the Agency over possible hypothetical flood risks, which had become apparent in the initial computer modelling undertaken for the site. However, this was resolved following revised modelling parameters. More recently the Agency has indicated that though it does not require a fish pass to be proved at the site, it would like to see an eel and elver pass incorporated into the design. To this end a specialist eel consultant was commissioned to provide drawings and schematics for a suitable eel pas. To complete this work the firm has had to undertake a low flow survey during this summer to ensure that water will always flow through the pass at all times of the year. This work is nearly complete and will be submitted along with a further descriptive narrative of the flood risk assessment and other project details for informal consideration by the EA this month. Subject to feedback from the Agency it should then be possible to proceed with formal planning consent. A public exhibition and drop-in session to show case the scheme was held at Hertford Theatre in December 2013. The afternoon was well attended with 78 people expressing support for the proposals and 2 indicating reservations.

## Review of Action Plan Activity:

Please note that commentary on the activity undertaken for each action is provided by way of an "Update" shown in bold, in the "Action"/ "Carbon Savings "columns below.

	Action	Carbon Emissions Saving	Benefit	Cost	Time
<u>Energy</u> <u>Buildings</u>					
Metering					
1.1	Introduce smart metering to	High	Relatively low cost.	Low	Med

	all council premises inc pools, offices, depot, car parks etc. Update: Use of smart metering investigated. Meters yet to be installed Provision had been made in capital programme, however, following recent negotiations with a major utility company it is hoped that it will be possible to provide smart meters later this year at no cost to the Council at almost all sites, except for those where there are		Accurate metering of all utilities, on demand and up-to- date. Ability to set warning thresholds.		
	telemetry reception issues.				
1.2	Metering linked to web & make available on intranet/internet/reception areas.	Med	Improve awareness of staff and public on energy use.	Low	Med
	Update: It is intended that the smart metering will be web enabled				
Technical Equipment					
1.3	Investigate use of Gas flow regulator – Wallfields.	Med	Some LA's have seen 5-8% reduction	High	Med
	Update: Agreed not to progress as officers have payback as insufficient at the current time, however, project will be kept under review in he light of continuing energy price rises.		in gas use.		
1.4	Investigate voltage regulation at depot/ Wallfields.	Provisional approximate total 6% reduction in	Case studies from LA's have shown 3- 7% reduction in electricity use.	Med	Med
	Update: Voltage regulator now installed and	electricity			

	operating effectively at Wallfields. Added advantage of voltage modulation is being achieved. Not progressing with voltage regulation at Depot as insufficient business case.	consumption at Wallfields, equating to annual saving of over 15,000 kg CO <sub>2</sub>			
1.5	Introduce 'Zoned Lighting' control in all office space and enhance flexibility of existing e.g. to switch off lighting adjacent to windows. Update: Zoned lighting introduced and operational at Wallfields.	Carbon saving not yet directly quantifiable but is estimated at 2% overall saving on Wallfields carbon emissions. Improved lux levels achieved through out building improved lux levels achieved through out Wallfields.	Reduces energy uses. Popular with staff. Good example.	High	Med
1.6	Introduce PIR lighting control – Wallfields and other facilities. Update: PIR lighting control now operational at Wallfields/Charringtons.	Ongoing year on year energy saving achieved. E.g contributed to carbon emissions reduction	Reduces energy use. Can switch off if little movement in room.	High	Med

		from electricity use at Wallfields of 13% for 2013/14			
1.7	Investigate auto power down of PCs. Update: Not implemented as use of virtual terminal has (thin client) is achieving significant energy reductions, and further reductions expected for next year as move to zero client is completed.	Med	Ease of control. Reduces energy consumption.	Med	Med
1.8	Investigate external shading to south elevation of Wallfields and /or replace glass conservatory roof with standard roofing. Update: Glass conservatory roof replaced with slate roof. Internal blinds fitted to all necessary windows to provide shading.	Refurbishme nt of Wallfields has contributed to reduction in natural gas used for heating and also cooling demand for summer period. Initial figure for summer 2014 shows that cooling demand is down despite warm summer – further detail can be provided on	Reduces cooling costs. Likely to be popular as overheating is a problem on top floor.	High	Long

1.9	Ensure solar reflective blinds are in place throughout all offices where necessary. Update: Blinds now fitted to all appropriate windows to provide shading/cooling.	summer cooling 2015 once all data available. Likely to be savings in electricity cooling costs, as the number of fans used within the building is very significantly reduced ( as well as glare reduction benefit) but actual CO <sub>2</sub> reduction is not quantifiable, although initial data from summer 2014 indicates above expected reduction in electricity demand.	Reduces cooling costs. Improves working environment.	Low	Quick Win
1.10	Enhance roof insulation of Wallfields to current standards.	demand. High	Improved insulation will reduce energy consumption costs.	High	Med/ Long
	Update: Investigated but not progressed during refurbishment programme due to apparent costings		Improved working environment.		
Renewables 1.11	Commission detailed report on potential for renewables	N/A	Provides comprehensive	Med	Short

	across Council buildings. Update: Micro Hydro scheme at Hertford Weir has good business case and is progressing ( likely saving 30-40% energy demand) Other options for other buildings are limited but officers are keeping options under review. With increasing energy costs and currently declining costs of renewables the business case for micro renewables is likely to change.		evidence for best value approach for renewables.		
1.12	Install solar thermal array to toilet block at Wallfields. Update: C3W consultants investigated options, but reported that costs appeared high and hence insufficient business case at that time. However, with increasing energy costs and currently declining costs of renewables the business case for renewable heat is likely to change.	Med	Reduces energy demand. Incentives available. Good exemplar.	High	Short
1.13	Install public exemplar solar PV array at Wallfields. Update: Solar PV array is being progressed with specific item in capital programme. Procurement options and detailed costings are being investigated this autumn. Should business case be met then installation could take place this financial year.	Med	Reduces energy demand. Good exemplar. Incentives available.	High	Short

1.14	Install 15kW turbine at Buntingford.	High	Reduces energy demand.	High	Med
	Update: Initial discussion with landowner held who was sympathetic but at current time business case appears insufficient and project not being progressed.		Good exemplar. Incentives available.		
1.15	Investigate installation of solar thermal at second public convenience e.g. Bell Street. Update: All suitable public conveniences have been closed as part of efficiency measures and the move to Community Toilet Scheme. Project not to be progressed.	Low	Reduces energy demand. Good exemplar. Existing project working well.	Low	Short
1.16	Install mini hydro facility at Castle Hall. Update: Micro Hydro scheme at Hertford Weir has good business case and is progressing (likely saving 30-40% energy demand) Other in December 2010. Funding agreed and included in current capital programme. However, serious delays have arisen due to requirements of Environment Agency to amend the specification of the scheme and to enable flood risk modelling/eel pass dessign to be carried out.	High	Reduces energy demand. Good exemplar Incentives available	High	Med
1.17	Investigate opportunity for	Low	Good exemplar.	Med	Med

1.18	solar signage in car parks. Update: No progress so far. Investigate rationalisation of server room to minimise power requirements. Update: IT Services indicate that they are continuing to review server requirements following the migration of staff to Wallfields. Cooling of servers is energy intensive and responsible for significant CO <sub>2</sub> emissions. It is expected that there will be a rationalization of servers over the coming year and this may reduce energy demand at Wallfields significantly.	High Current 2013 carbon emissions from Servers are approx 230,000 kg CO <sub>2</sub>	Small energy reduction. Reduce energy consumption.	Low	Med
1.19	Reduce unnecessary storage of data on servers. Update: IT Services are looking at opportunities for energy efficiencies wherever possible	Med	Reduce energy consumption.	Low	Short
1.20	Increase occupancy level of Wallfields to reduce per head heating demand. Update: As part of C3W programme occupancy level of Wallfields has increased dramatically as staff moved from the Causeway at Stortford.	High	Reduces per head heating costs.	High	Med

	Heating demand has decreased, but summer cooling need may be increased, however, initial data from warm summer 2014 has indicated that this may not be the case. Extensive range of passive cooling measures has been installed. Due to the relatively cool summers in 2012/13 their true operational efficiency is still yet to be fully determined.				
1.21	Encourage home working by staff. Update: As part of C3W programme home working has been actively encouraged and a significant minority of staff have become home workers on a regular basis with a further proportion doing so on an <i>ad hoc</i> basis. "Remote working' technology for field staff rolling out.	High	Reduces energy demand. Reduces desk space. Flexibility for staff.	Low	Short
1.23	During planned maintenance introduce high efficiency lighting for car parks. Update: No progress on this measure as this is a longer term project that would be considered as part of planned maintenance	High	Reduced energy demand. Good exemplar. Reduces light pollution.	High	Short
1.24	Update: EHC is continuing to work with leisure contractors SLM to incorporate energy conservation and	Despite programme of efficiency measures CO <sub>2</sub>	Likely high reduction in energy demand.	High Grant Availabl e	Med

Hartham     Z013/14.       replacement high     efficiency glazing at       Grange Paddocks     Grange Paddocks       ariable speed drives     installed at all pools to aid       efficient pool water     circulation
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	new air con units at Fanshawes/ Hartham & Grange Paddocks. medium in pool filters replaced with silica glass granules which is more efficient filter reducing energy and chemical use.				
1.24.1a	Utilise electrical timer devices to switch off vending machines in council buildings including leisure and office facilities, when the buildings are unoccupied.	Low	Low cost and reduces unnecessary electricity consumption	Low	Short
	Update: Facilities Service are replacing ending equipment during summer 2014 and it is understood that the machines will be more energy efficient.				
Water 1.25	Fit spray taps as standard and on replacement. Update: Spray taps to be fitted as part of planned maintenance wherever practicable.	Low	Low cost. Reduces water consumption.	Low	Short
1.26	Fit dual flush toilets as standard and on replacement. Update: Dual flush toilets to be fitted as part of planned maintenance/ refurbishment wherever practicable.	Low	Reduces water consumption. Low cost.	Low	Short
1.26.1a	Install timer control devices to urinals to reduce unnecessary flushing	Low	Reduces water consumption. Low cost.	Low	Short

	Update: Timer control devices fitted to all appropriate units.				
1.27	Investigate potential for rainwater harvesting at Wallfields and other sites. Update: Officers investigated options for Wallfields and Depot, but currently installation costs are high and water unit costs are low. Harvesting of water would allow EHC to be self sufficient in water for irrigation for crucial watering of bedding plants/trees early in the season. As well as saving water this allows watering to continue even due to drought periods such as that initially experienced at start of 2012, but recent winter 2013 has seen above average precipitation.	Water harvesting will indirectly reduce carbon emissions slightly as water supply production is relatively high energy user	Good exemplar. Water saving.	High	Med
1.28	Introduce carbon offset budget to compensate for corporate carbon footprint. Update: Not currently progressed, as no financial benefit at this time	High	Enables Council to be carbon neutral. Good exemplar project. Provides budget for other projects.	Med	Short
1.29	Introduce teleconferencing facilities to reduce need to travel. Update: Systems investigated in the past, but no business case to progress.	Med	Reduces need to travel. Reduces costs. Convenience.	Med	Med

1.30	Promote 'Go green' on the office kettle – investigate instantaneous hot water heaters for Wallfields. Update: Instantaneous water hot water heater installed in most kitchen points in main buildings.	On balance slight carbon saving but verydifficult to quantify	Potential energy saving. Convenience / reduces wasted staff time.	Low	Short
1.31	Investigate use of Pool covers at Pools. Update: See note 1.24 above.	Med Use of pool covers at all pools is estimated to be saving carbon emissions by 75,000 kg CO <sub>2</sub> per annum	Reduce energy consumption & condensation.	High	Med
1.32	Investigate new Environmentally more friendly water cleaning /UV / ionization. Update: Medium in pool filters replaced with silica glass granules which are more efficient filter reducing energy and chemical use.	Not possible to quantify individual carbon saving – see section 1.24 above	Energy reduction. Good PR.	High	Med
1.33	Phase out use of bottled water in council premises where contracts allow Update: Bottled water has been phased out at all locations unless there is no other option for the provision of a ready supply of drinking water. Further tap water provision has been provided at Wallfields due to the increased number	Low Carbon saving not possible to quantify	Reduces carbon emissions from production and transport	Low	Short

	of kitchen facilities following refurbishment works, thereby further minimising use of water bottles.				
1.34	Promote the use and introduction of 'Hippos' (water saving devices)to reduce flush in toilet cisterns	Med	Water and Energy saving Raises awareness	Low	Short
	Update: Not progressed. Use of dual flush as part of planned maintenance is preferred.				

	Action	Carbon	Benefit	Cost	Time
	ACION	Emissions	Denenit	CUSI	TITLE
		Saving			
Transport		Carnig			
	Implement Car share Date	<b>Fatimated</b>		1	Chart
2.1	Implement Car share Data base linked to HCC.	Estimated		Low	Short
	Provide Car share spaces	4,180 kg CO <sub>2</sub> saved for			
	Investigate benefits of	Liftshare			
	providing Pool cars and	members	Encourage share	High	Med
	Staff minibus between sites.	during 2012	Discourage use	lingii	Mod
		year, based	_ loco di digo dico		
	Update: The use of car	on one			
	sharing helps to maximise	registered	Multi-functional		
	use of the available	journey per	courier		
	spaces.	week (46			
	East Herts Council car	week year).			
	share data base system in	lf 5 days a			
	operation available for all	week then			
	staff and members,	saving			
	operated by "Liftshare"	increases to			
	and linked to intranet.	20,900 kg CO <sub>2</sub>			
	This allows regular and <i>ad hoc</i> journeys to be	$\mathbf{CO}_2$			
	requested. System is also				
	linked to HCC and other				
	Hertfordshire based				
	public sector clients, plus				
	options to share with				
	Hertfordshire/UK wide				
	public data base should				
	the user wish.				
	At the current time (Aug				
	2014) there are 66				
	registered staff users.				
	There are 9 regular				
	sharers, with a share rate of 32.8%.				
	The majority appear to be				
	for regular commuting				
	purposes, with just a				
	couple for business				
	travel.				
	In addition to Liftshare 7				
	members of staff in				
	Environmental				

	Services/Community Development car share on a regular weekly basis amongst themselves. Staff bus between sites and the idea of pool cars has not been progressed on cost benefit grounds.				
2.2	Investigate "Green leased cars" eg biofuel mix and LPG / extend lease car period / CO2 emissions limits Update: Lease scheme deleted as part of Terms and Conditions review.	Med	Lease vehicles tend to be more fuel efficient as more modern engines and regular maintenance, than privately purchased vehicles.	Cost borne by staff	Med
2.3	Permit LPG use in staff vehicles. Update: Lease scheme deleted as part of Terms and Conditions review.	Med	Overall CO <sub>2</sub> reduced.	Cost borne by staff	Med

Member Travel					
2.4	Investigate opportunities for reducing member travel through car share /location of meetings/ opportunities for use of IT	Low	Reduce car travel.	Low/ Med	Med
	Update: Through C3W and the move to a single site, meetings will in the main take place at Wallfields. The Car Share scheme is open to both staff and members. A car share promotion is planned for October 2014.				
Staff Commuting					
Cycle/walk					
2.5	Investigate potential for encouraging increased cycle use by staff and members including: Provide Adult cycle training. Cycle storage at work. Provide better changing facilities/Showers/ hairdryers. 'Ride to work scheme'. Electronic charging points. Bike mileage scheme. Incentives. Pool bikes.	Likely low	Carbon saving. Health benefits. Subsidised bikes.	Med	Med
	Update: Electric car charging points have been installed at Gascoigne Way car park. Bike mileage scheme is in operation. Hertford Theatre has been asked to promote the availability of public transport/ location				

	of cycle racks in appropriate publicity material. A ride to work scheme providing discounts on the purchase of new bicycles - on a salary sacrifice basis – is available for staff.				
Bus/Trains					
2.6	Promote season ticket loan scheme for staff To/from work On business EHC funded bus service	High High	Reduced emissions. B/S to Hertford.	High High	Med Long
	Update: Officers are continuing to investigate all opportunities to promote greener staff travel, but initiatives above not implemented so far, due to cost.				
2.7	Investigate reciprocal office arrangements with other local authorities Update: Not progressed but some staff now working in other locations due to 'shared services' partnering e.g with Stevenage Council for certain functions. The Council also shares reception space with South Anglia Housing Association and the HMRC at Bishops Stortford and Wallfields respectively.	Med	Staff work near home reduce commuting time / carbon emissions	Med	Med

Contractors vehicles /					
transport 2.8	Investigate and implement stricter Environmental criteria in contracts relating to transport issues – readjust weighting of contract evaluation. Carbon limits for tenders Mapping routes. Alternative fuel / electric vehicles. Update: In place as necessary. Environmental criteria are strengthened where possible as was case when the Waste Contract was last tendered. Energy savings achieved by the contractor ultimately are passed on to the Council through a reduced contract price	High	Improved environmental performance.	High	Long

Procurement	Action	Carbon Saving	Benefit	Cost	Time
3.1	Investigate Video conferencing and advanced communications. Update: Web casting of certain public meetings and committee meetings is now available. http://www.eastherts.public- i.tv/site/ For staff IT effort is currently geared to enabling staff to work at home/remotely. This will mean significantly fewer journeys for staff to/from work.	Med	Reduced travel to meetings. Time saved travelling.	Med	Med
3.2	Investigate "Wireless town hall" approach including: Update: Increased use of internet available council services including payments and planning applications on line are in operation. Greater use of electronic document management. Greater use is being made of managing/storing documents electronically rather than retaining paper copies. Examples can be found on East Herts web site as follows: http://www.eastherts.gov.uk/ind	High	Reduced paper.	High	Med

	ex.jsp?articleid=9376 - on line benefit claims and keeping track of payments http://www.eastherts.gov.uk/ind ex.jsp?articleid=12699 - on line housing applications http://www.eastherts.public- i.tv/site/ - web casting of meetings and on-line consultations - http://www.eastherts.gov.uk/ind ex.jsp?articleid=16149 saves paper				
3.2.1	a) Cordless office telephones which permit mobile workstations. Update: Not introduced. Some staff work at home. All staff can log in to any work station.	Home working staff commuter data not quantifiable	Faster decision making as meetings can be held sooner than otherwise.	High	Med
3.2.2	b) WiFi – access to Council network from any workstation, Update: New IT system permits access to all files from any workstation in office or from any PC.	High	Increased speed of resolving problems / better customer service.	High	Med
3.2.3	<ul> <li>c) Workflow         <ul> <li>improvements e.g.</li> <li>"prompting" to advise a             message has been             received.</li> </ul> </li> <li>Update: New IT system         permits access to all         files from any         workstation in office or</li> </ul>	High	Reduced number of workstations and saving in office space.	High	Med

	from any PC.				
3.2.4	<ul> <li>d) Home working – IT and telephony at home.</li> <li>Update: New IT system</li> </ul>	Home working staff commuter data not	Reduce travel to/from work. Office space savings.	High	Med
	permits access to all files from any workstation in office or from any PC.	quantifiable			
3.3	Provide oasis links with partners – e.g. accessibility from Town and Parish Council offices. Update: Not directly progressed but new IT system permits access to East Herts network from any workstation in office or from any PC.	High	Reduced need for customer travel to visit office – vehicle emissions savings.	High	Med
3.4	Investigate potential of providing access to Council services from mobile locations e.g. "mobile town hall" vehicle. Update: Not progressed	High	Improved customer service. Payments made more quickly	High	Med
3.5	Investigate opportunities for "Paperless meetings" for officers and Members wireless access; mobile devices; tablet style PC's in meeting rooms; software that permits electronic note making on committee agendas; digitizing of hand written notes.	High	Reduce paper / printing (including water, energy and ink).	High	Med

	Update: IT Services continue to investigate range of options to enable more efficient methods of working. New IT system more energy efficient. It is hoped that it may be possible to quantify carbon saving in a future report once sufficient data collated.		Require fewer / smaller printers – leasing and maintenance savings. Saving in staff time – both print unit and service staff making copies.		
3.5.1	Omit the last blank page from Council committee agenda papers – replace with worded statement at end of report to indicate final page <b>Update: Completed</b>	Low	Reduces paper	No cost	Short
3.6	Revise default printer settings – double sided and replace single side printers. Update: Double sided printing is undertaken on most machines, where possible.	Low	Reduce paper.	Low	Quick Win
3.7	Ensure all new PC's are low energy units. Update: IT Services now actively consider energy efficiency of equipment during procurement process and new equipment that is currently being installed is significantly more energy efficient. It is hoped that it may be possible to quantify carbon saving in a	Low	Electricity saving.	Low	Quick Win

	future report once sufficient data collated.				
3.8	Procure software for automatically powering down PCs after a period of non-use. Update: Following roll out of new IT equipment during 2014 it is hoped that it may be possible to quantify carbon saving in a future report once sufficient data collated.	Current 2013/14 carbon emissions from PC terminals are approx 110,600kg CO <sub>2</sub> This is likely to reduce with installation of new IT equipment this year.	Electricity saving.	Med	Med
3.9	Procure hardware for turning off electrical equipment at the socket rather than leaving on standby. Update: Not yet implemented. Procurement of electrical timers is being investigated for larger electrical equipment as part of web based metering proposal	Med	Energy saving Convenience	Low	Short
3.10	Review server room energy usage of hardware and air conditioning Allow temp of server room to rise to 25C (from 20C) save a/c costs. Virtualisation increases server/system efficiency. Update: Increased virtualization of IT underway, but no specific movement on	Current 2013 carbon emissions from Servers are approx 230,000 kg	Electricity saving	Low	Med

	server room technology				
Other					
3.11	Continue to specify use of sustainably sourced (FSC) timber for projects and procurement.	High	Protects forests. Ethically correct.	Low	Quick Win
	Update: Council policy in place. FSC timber specified where ever available.				
Contracted out services					
3.12	Investigate potential for energy saving / procurement saving measures within contracts.	Low	Possible reduction in energy consumption. Reduction in costs. Batter procurement choices.	Med	Med
	Update: Energy efficiency is now a factor that is considered within major contracts e.g as was the case with the Waste Contract leading to balanced approached between energy/cost efficiencies				
3.13	Investigate potential for enhanced recycling facilities in leisure facilities.	Low	Popular with public.	Low	Short
	Update: No progress to date.				
Contractors vehicles / transport					
3.14	Investigate and implement stricter Environmental criteria in	High	Potential carbon saving	High	Long

	contracts relating to transport issues – readjust weighting of contract evaluation. Update: Stricter environmental criteria are now increased in consideration within new contracts e.g Waste Contract. Carbon limits for tenders Mapping routes. Alternative fuel / electric vehicles.	There has been a fall of		
	Venicles. Update: The waste contract has delivered considerable ongoing CO <sub>2</sub> savings since the 2009 baseline, mainly as a result of improved scheduling of rounds using mapping technology and the use of newer more energy efficient vehicles. 33% reduction in emissions from the fuel use of the refuse freighters between 2012/13 and 2013/14. This is because in November 2013 the number of recycling vehicles changed from 8 kerbsider vehicles to 6 twin packs together with a move to zonal working on rounds making collections more efficient.	97,193 kg CO <sub>2</sub> emissions over the past 2013/14 year overall, with a 33% reduction in that form refuse freighters.		
Contracted Services –				

Strategic Procurement					
3.15	Review Council Procurement Strategy re contract terms for operational contracts - Requirement for contractors to show carbon reduction over life of contract - Contract performance criteria re carbon reduction Contracts to require tenders to include alternative options and costs for provision identifying the carbon impact of each e.g. alternative tuels; alternative fuels; alterations to operational building; contractor staff travel. Update: Specific questions were asked of waste contract tenderers relating to potential improvements over life of contract. Enhanced environmental performance criteria have been achieved.	High	Ensure that carbon efficient options are considered at contract award stage. Engage contractor is supporting the Council's Policy objectives on Climate Change.	High	Long

Contracted Services – Operational improvements					
3.16	Review Refuse and Recycling Service rounds to identify costs and carbon benefits of re- scheduling. Update: Review was included in Waste management contract. It is a requirement of the Waste contract that a reduction in carbon savings is sought during the life of the contract.	There has been a very significant 33% reduction in emissions from the fuel use of the refuse freighters between 2012/13 and 2013/14. This is because in November 2013 the number of recycling vehicles changed from 8 kerbsider vehicles to 6 twin packs together with a move to zonal working on rounds making collections more efficient.	Reduction in fuel usage benefiting contractor and the Council.	High	Med
3.17	Request County Council to include carbon impact assessment when determining disposal / re- processing locations. Update: Reference made to HCC to confirm use of carbon impact assessments.	Med	Less distance to travel to tip – fuel saving.	High	Long

3.18	Next Refuse and Recycling contract to include options and costs for alternative fuels for vehicles and evaluate emissions of vehicles. Update: Wide range of options included in new contract eg enhanced use of Biodiesel, on board vehicle driver performance monitoring, agreement to reduce carbon emissions over life of contract.	Significant ongoing energy efficiency savings achieved amounting to total of 27% reduction in CO <sub>2</sub> emissions between 2008/09 and 2013/14.	Fuel savings.	High	Long
3.19	Recycling –Continue to develop options to increase level of recycling relative to waste sent to landfill. Update: Ongoing eg mixed plastic recycling was introduced from mid 2011. Co-mingled to introduced November 2013.	High	Reduce emissions from landfill.	High	Long
	Overall total waste going to landfill reducing so reducing greenhouse gas (principally methane CH <sub>4</sub> ) emissions from landfill. Note: CH <sub>4</sub> is 21x more damaging than CO <sub>2</sub> .				
3.20	Recycling - introduce monitoring of carbon impact of materials collected Depot operations – set targets for contractors to contribute to reduction in energy use.	Med	Better understanding of how recycling impacts on the Council carbon footprint. Set targets which involved contractors.	Med	Med

	Update: Monitoring of carbon impacts of recyclables on ongoing basis.				
3.21	Depot operations – evaluate energy efficiency of materials processing machinery.	Med	Procure energy efficient machinery.	High	Med
	Update: Not yet implemented				
3.22	In future procurement/ service contracts the Council will consider the impacts of Climate Change, where appropriate.	Variable – depending on contract	Reduced carbon emissions Potentially helps achieve national/ local carbon saving targets	Variable	Variable
	Update: Impacts of carbon reduction considered in waste contract, however, need to examine how best to include Climate Change /carbon reduction initiatives in other Council procurement contracts. Officers to raise this with Procurement Manager.				

Planning	Action
4.1	<ul> <li>Planning will require and enforce the requirement for new developments of more than 10 dwellings or 1,000m<sup>2</sup> of non-residential floor space to secure at least 10% of their energy from decentralised renewable or low-carbon sources, or onsite renewables unless this is not feasible or viable.</li> <li>Planning Policy advise that this action can now be deleted as it cannot be required, since it is unlikely to proceed though the examination process for inclusion within the new Plan in 2016. This is due to changes in the national planning strategy approach.</li> </ul>
4.2	Planning will require development to comply with policy in respect of flood prevention and alleviation.
4.3	Planning will require the incorporation of Sustainable Urban Drainage systems in accordance with the recommendations of the Council's Strategic Flood Risk Assessment and the Flood and Water Management Act 2010. Hertfordshire County Council is the Lead Local Sustainable Drainage System (SUDS) Approving Body or 'SAB'.
4.4	Planning will seek to encourage, where appropriate and viable, new developments to install District Heating systems and Combined Heat and Power (CHP) generation facilities, in accordance with national policy as part of a series of approaches and allowable solutions.
4.5	Planning will require new development to achieve ambitious standards in sustainable construction, measured against the Code for Sustainable Homes and the BREEAM building standards for non-residential development.
	East Herts, where possible, encourages developments to exceed the minimum requirements of Building Regulations.

4.6	Planning will seek to encourage new development to incorporate facilities for zero-and low emission vehicles.
4.7	Planning will seek to encourage new development to maximise opportunities for more sustainable modes of transport, including cycling and walking.
4.8	Through the emerging East Herts District Plan, Planning will set ambitious but viable targets for renewable and decentralised energy generation.
4.9	Through the emerging East Herts District Plan, Planning will work with the County Council's Waste Local Development Framework to establish a policy framework which reduces the impact of waste disposal and maximises the opportunities for use of waste as a resource.
4.10	Through the emerging East Herts District Plan, Planning will support in principle opportunities for innovative sustainable development initiatives across the District
4.11	Through the emerging East Herts District Plan, Planning will consider opportunities for development of sustainable and renewable energy sources such as biomass generation.
	Planning encourages all development across the District to use appropriate and viable solutions for renewable energy generation and use where feasible.
4.12	Through the emerging East Herts District Plan, Planning will require developments to address climate change adaptation measures, such as provision of green infrastructure.
4.13	The Council will seek to raise awareness of national guidelines relating to permitted development in respect of permeable paving and installation of domestic micro-renewables outside conservation areas.
	Planning is continuing to encourage the use of such features where appropriate
4.14	The Council will continue collaborative working between Planning Policy and other teams such as Environmental Services in order to develop a robust evidence basis for Climate Change policy development.
4.15	The Council will continue to promote awareness of the Hertfordshire Building Futures website <u>www.hertslink.org/buildingfutures</u> in order to encourage higher standards of development within the district.

	Action	Carbon Saving	Benefit	Cost	Time
Promotion and Awareness					
5.1	Caretakers to check that printers & copiers are switched off during night time close of buildings.	Med	Low cost	No cost	Quick Win
	Update: Has not been added to duties of caretakers. Instead staff are requested to turn off screens when leaving the office.				
5.2	Staff awareness sessions to include climate change / energy / facts and figures / top tips.	Low	Improves awareness. Demonstrates commitment from senior management.	No cost	Quick Win
	Update: Top tips on energy saving to be promoted to staff e.g through Staff Update as occasional featurelater in 2014; and, additional information to be provided in kitchen areas. Liftshare promotion /recycling promotions during October 2014.				
5.3	Introduce climate / carbon awareness at staff induction. Update: Possibility of including a top tips/information for staff to be considered.	Low	Improves awareness of measures available. Reduces energy consumption. Improves recycling targets.	No cost	Quick Win

5.4	Discuss with HR feasibility of including climate change / carbon reduction as element of all staff JD's /PDR. Update: HR have advised that this is	Low	Raises awareness and increases opportunity for positive actions.	No cost	Short
5.5	difficult to include. Include carbon implications assessment on committee report. Update: Not implemented, as carbon calculations can be difficult to quantify, but key issue is to insure that energy efficiency is considered at procurement/design stage of projects	Med	Raises awareness and identifies carbon "costs".	Low	Med
5.6	<ul> <li>Increase ready access to recycling receptacles:         <ul> <li>Reduce number waste bins</li> <li>Increase number of paper recycling bins.</li> </ul> </li> <li>Update: Number of general waste bins has been reduced throughout offices.</li> <li>Increased number of recycling bins including can collection.</li> <li>Large paper recycling wheelie bins are located at strategic points on each floor.</li> </ul>	Low	<ul> <li>Improves recycling</li> <li>Reduces waste to landfill</li> <li>Highlights issue</li> </ul>	Low	Short

5.7	Promote office recycling initiative on regular basis. Update: Staff recycling awareness promotion carried out during 2013 and will continue on <i>ad</i> <i>hoc</i> basis.	Low	Low cost. Popular with staff Easy.	Low	Quick Win
5.8	Promote energy insulation measures to staff. Update: Energy efficiency awareness promoted on <i>ad hoc</i> basis - likely use of Herts Sustainability campaign posters during 2015	Ditto	Ditto	Ditto	Ditto
5.9	Investigate Introduction of Ioan / deduction from salary for purchase of domestic loft / cavity wall measures by staff. Update: Not progressed to date, as local residents/nationally operated schemes were in operation.	Low	Popular with staff Reduces energy consumption Helps with NI186 target.	Med	Short
5.10	Investigate possibility of making staff 'Update' electronic only. <b>Update: Completed</b>	Low	Reduces cost. Saves paper.	Low	Short
5.11	Investigate potential for provision of safer driving / fuel efficient driver training for staff and members possibly linked to advanced driver training course.	Med	Reduces cost. Low cost if lunchtime seminar.	Low	Short
	Update: Fuel efficient driver training has been investigated, but no				

	budget available. Officers will continue to investigate any options for subsidised training through external agencies, should they become available.				
5.12	Encourage staff to allow more time to travel to meetings to encourage speed reduction. Update: This is reflected in corporate	Low	<ul> <li>Low cost</li> <li>Increased safety</li> <li>Reduces fuel consumption</li> </ul>	Low	Quick Win
5.13	advice to staff On electronic marketplace procurement investigate promotion of carbon footprint on standard items to allow comparison. Update: Not yet investigated. Environmental Services officers will discuss potential for this with Corporate Procurement Manager.	Med/ High	<ul> <li>Increases awareness.</li> <li>Highlights other environmental costs of procurement options.</li> <li>Better informed choices.</li> </ul>	Med	Short
5.14	Promote concept of a 'computer siesta'. Update: Use of new highly energy efficient equipment means this is less of an issue but see To be included in staff awareness advice as appropriate.	Low	<ul> <li>Promote concept of turning off PC when away from desk for any length of time.</li> <li>Good practice.</li> </ul>	No cost	Quick Win
5.15	Encourage a switch off lights campaign. Update: To be included in future staff awareness advice, although new lighting in	Med	Low cost Energy saving.	Low cost	Quick win

	Wallfields/Charringtons zoned and PIR linked to occupancy.				
5.16	Appoint volunteer staff energy wardens to promote switch off campaign.	Low	Low cost Energy saving	No cost	Quick Win
	Update: Not yet implemented				
5.17	Investigate further improvements to office recycling, as good basis for staff awareness / promotion of climate change.	Low	Low cost	Low	Short
	Update: Number of general waste bins has been reduced throughout offices. Increased number of recycling bins including can collection.				
	Large paper recycling wheelie bins are located at strategic points on each floor.				
5.18	Promote use of 'Hippos' (water saving devices) to reduce flush volume in toilet cisterns	Med	Low cost Useful promotional tool	Low	Short
	Update: 'Hippos' not used for Council premise as dual flush toilets preferred option. However, water saving options/kit were promoted to local residents/staff in October 2013 through "Don't be a Drip campaign" launched by Herts Sustainability Forum, of which EHC is				

	an active member. Water usage in East Herts, along with the rest of Herts is highest in UK at approx 170 litres per person per day. Top new build regulations aim for 105 litres ppd, but still need to reduce use in existing household as Herts is one of driest areas in UK and water resources are under severe pressure.				
5.19	Investigate development of a staff volunteering scheme to promote team development and undertake small scale local community environmental improvements Update: Not progressed	Low	Positive staff development tool Potential to link with other organisations e.g. Groundwork and Herts and Middx Wildlife Trust Will enable small projects to be undertaken	Low	Med
5.20	Undertake staff environmental awareness to provide briefings on carbon saving/green measures at home and work Update: Staff	Low	Provides information for staff. Encourages uptake of carbon saving measures and spreads corporate message	Low	Short
	awareness to be promoted through Update magazine on <i>ad</i> <i>hoc</i> basis				

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