Appendix B

	Headline Measures	Responsibility	Funding / Risks / Actions	Timescale
1	Retrofitting existing estate – 17-25% reduction in estate carbon emissions through holistic energy and water efficiency packages (use 21% as median figure). Capital costs from unsupported borrowing, guaranteed payback from energy savings in less than 10 years	Project Team PPPU / CPM / EDU	Contractual payback guarantee - unsupported borrowing. Funding secured for schools project management and contract management capacity.	2011-2015
	Progress Schools Carbon Reduction Officer post£50k per annum 2011/14 to implement scheme. Comments noted from DES on an alternative model. Accepted for CLCSS scheme which will provide resources from Carbon Trust to undertake initial project to engage with schools on energy reduction	Anne Chambers Polly Cook	8 / 10 schools pilot launched at Westerton Primary. Energiser sessions started with inschool eco-teams to promote action mainly in years 5/6. Investigating boiler optimisation to reduce gas consumption by 15%. Poster campaign Jan 2012. Once scheme finished look to roll out to other schools.	April 2012
	Building Energy Management systems standardised to 2 companies – Trend & Priva	Andy McCulloch Pete Lynes	Trend is predominant BEMS in sites and new installations Trend (Priva at John Charles) Tender for maintenance to be in place by Apr 2012. Networking costs from Salix fund. BEMS upgrade site list required.	Apr 2012
	Utilise SALIX (SERS) loan scheme for annual programme to retrofit carbon reduction measures on LCC buildings. Explore utilisation of SALIX for ICT projects. Include schools – to be administered through CPM.	Andy McCulloch George Seedhouse	Quarterly update to C&WMG. £500k to be commissioned by Apr 2012. VO tender checked by Salix and due in end Nov 2011.	Mar 2012

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Deliver the Clinton Climate Initiative RE-FiT programme to § 7 corporate buildings (Armley Mills – Abandoned) and 2 schools.	Polly Cook	E-On appointed as contractor and contracts signed. Leisure centres to start Dec 2011 with other sites to follow.	Mar 2012
Changing the Workplace - Phase 1: City Centre, reducing emissions by reducing the back office space occupied. Energy savings as marginal benefit to reducing total cost of occupied space. Assume a 15% reduction in occupied space and 25% reduction in assoc carbon	Programme board / Project team		2011-201
Programme for reducing city centre buildings		Surrendering 2 leased buildings (Cannon & Leeming). Retrofitting works to Civic Hall, Apex, 2 Great George Street, Leonardo & Thoresby. Major refurbishment of Merrion to BREEAM excellent standard if possible.	Feb 2012
Changing the Workplace - Phase 2: Outside the City Centre, reducing emissions by reducing the back-office space occupied. Energy savings as marginal benefit to reducing total cost of occupied space. Assume a 10% reduction in occupied space and 10% reduction in assoc carbon	Programme board / Project team for each project	Business cases to reflect savings in running costs. Capital Programme disposal of surplus property - subject to market demand.	2011-202
Assess use of Civic Buildings Portfolio	Anne Chambers	Plan to vacate Otley OSC	Sep 201

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3	Service rationalisation of public-facing buildings. Reduction in size of estate and replacement with higher performance buildings (appendix 2, section 1.7 and 1.8)	Project teams (CPM / Services)	Service reviews and asset management rationalisation projects ongoing.	2011-2013
	Approximately 68 buildings in asset rationalisation to save £1.7m in 2011/12	Anne Chambers	Ongoing.	Mar 2012
	Large scale renewables - Wind turbines (2-3) and district heating (1 or 2 areas) large scale biomass (e.g. anaerobic digestion (AD) plant) funded primarily by private sector investment in return for guaranteed demand from LCC, reduce estate emissions	Project teams to be initiated by SAM	Business cases to be brought forward to SIB. Partnerships for Renewables or similar external finance. Planning risks to be carefully managed.	2015-2017
	Explore possibility of utilising Civic Quarter - CHP - Universities & Leeds Teaching Hospitals	Dave Grooby Christine Addison	Maybe some spare capacity for City Centre buildings, highlighted in spec for Merrion and consider in any boiler replacements. Options report to SIB on future involvement December 2011.	Mar 2012
	Wind Turbine	Pete Lynes	Rothwell Country Park - Feasibility business case (Arups to provide approx costs) to Finance Performance Group (FPG) November.	Oct 2011
		lan Waller	John Charles Centre for Sport – All turbines recalled and company in receivership. Alternatives sought.	

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Behavioural / "soft" techniques in use of buildings and equipment. Current targeted low-cost / no cost measures, self funded in first financial year (appendix 2, section 1.3)	SDU / Services CPM / IT	Requires continuing action. Funded from current financial year savings.	2011-2021
Million pound budget reduction for 11/12. No cost low cost actions. Assess future of Big Switch Off events Quarter 2 shows increase in spend but reduction in consumption.	Anne Chambers Jon Andrews	11/12 programme to be managed through C&WMG. Consumption & cost (PL / ME) info distributed to and displayed at sites. Big Switch Offs to be increased. Corp Comms coming to next C&WM Group meeting.	Mar 2012
Fleet vehicles - alternatively fuelled vehicle trial could result in cost- effective transformation of entire refuse vehicle fleet to biogas, reducing emissions by 50%. (appendix 2, section 3)	Commercial Services	Likely cost of circa £14m for AD plant (which could attract grants, PFI and other credits) and savings of circa £2m pa against current costs of diesel, plus potential for LATS credits, RTFO credits etc.	2011-2015
Bio-methane infrastructure in place.	Terry Pycroft Richard Crowther	Monitor ongoing maintenance and serviceability of vehicles for this full term. Increase bio-methane in LCC fleet and external companies also interested incl Ambulance.	Mar 2012 - 2014

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7	Switch majority of remaining fleet vehicles to alternative fuel including hybrid and electrical. Plus efficiency gains from EU programmes to reduce carbon emissions from all vehicles. Assume 30% reduction. Use of grants and may require borrowing to finance	Commercial Services	Infrastructure - Department for Transport grants and Local Authority Energy Fund. Vehicle replacements funded from Revenue savings.	2013-2015
	Some hybrid and electric vehicles in fleet.	Terry Pycroft	Leeds to be hybrid hub for buses / mini buses. No alternative fuel drivers or subsidies to date. Leeds Uni Student project to benchmark vehicles.	2013-2015
8	Use of new street lighting luminaires and control gear plus different lighting regime. Assume additional 10% reduction (appendix 2, section 1.11)	Highways & transportation	Local Authority Energy Fund / Salix. Risk - drive for changes needed through PFI contract	2012-2014
	Continue progress with street lighting PFI contract.	lan Moore	Replacement of 71,982 units. (Stage 9 of 10) Emissions are rising needs investigating - reassessment of baseline position, passive / dynamic metering. Examine use of LED.	Jul 2011
		Andrew Molyneux	Cllr queried street lamp numbers, lamp efficiency and increased consumption / costs with Highways. Reasons for increasing consumption / costs required – PL to follow up.	

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Small scale renewables - Contribution of dispersed hydro-electric, solar thermal, photovoltaic and building scale biomass reducing building related emissions by circa 2% (appendix 2, section 2.2.2 - 2.2.6)	Project teams to be initiated by SAM	Partnership for Renewables or similar capital costs borrowed, with cost of borrowing covered by new Feed-In Tariff. Risk of uptake of biomass due to technical / operational issues	2012-2019
Hydro feasibility	Peter Lynes Polly Cook	Armley Mills the only possible go ahead as both technically and financially feasible. Exec Board report in Jan 2012. General consultation to be carried out.	Jan 2012
PV	Polly Cook	Project approved but lower £ value as FITS reduced. FPG to agree new business model. Possible Phase 1 to go ahead at 10 sites – procurement docs to go out. At moment no financial benefit to schools. To be complete by end Mar 2012.	Mar 2012
Biomass Boilers	Andy McCulloch George Munson Peter Lynes	Exploring feasibility to replace oil at Lotherton hall and Herd Farm	Mar 2012

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20%	ness travel planning and outsourced vehicles to be improved by circa through EU programmes to reduce carbon emissions from all cles. (appendix 2, section 1.4)	SDU / Services	No cost to LCC.	2011-2021	
emplo targe optio	inue to complete site travel plans for all LCC sites where there are over 60 oyees. Includes evaluating grey fleet business mileage at each site, setting its for mileage reduction if appropriate and promoting sustainable travel ns. Business Travel policy in development to support directorate travel through which all business travel will be booked	Liz Bennett Andy Hill	Site Travel Plans approved by appropriate SMT. 48 buildings identified requiring Sustainable Travel Access Guides (STAG). 28 complete.	Mar 2011	
Com	pliance / Performance				
Exter	rnal EMAS audit Nov / Dec 2011 to provide back up to CRC compliance.	Jon Andrews Ania Campbell	Agreed as task for Environment Policy Team.	Ongoing	
Unde	ertake DECs for all relevant buildings	Anne Chambers Steve Callery George Seedhouse	S&AR complete. NPS quoting for primary schools. CPM & Secondary schools to follow.	Sep 2011	
Explo	ore post occupancy evaluation or BREEAM		2 schemes rejected, another to be identified. Include within energy review for relevant responsible person. Compton and Reginald Centre – Excellent.	Mar 2011	

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	Data			
	Monitoring Water Consumption	Peter Lynes	YW offering water infrastructure investigations to reduce losses - review and paper to FPG. EDI billing to Team in future.	Aug
	Implementation of TEAM software	Peter Lynes	Electric complete.	Aug
			Gas / Water to complete.	Oct
			Business case required for future development ongoing.	
	Carbon Reduction Commitment (CRC)	Peter Lynes Helen Mylan	Footprint report for 10/11 submitted to CRC to asses 10% levy for 12/13. Plus annual report. Info to feed into following year revenue budget. Now discovered that payment required for 2011/12.	Jul
1	Organisation			
	Undertake a review of the organisation of officers undertaking energy management roles e.g. SDU / Fuelsavers, CPM, PPPU Resources needed for assessing suggestions and audit of buildings.	Paul Maney	Quarterly report required. ME Energy Savings Initiative briefing note to CLT.	Dec
		Jon Andrews	To collate a who's who of C&WM for LCC.	

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Contracts			
Best value procurement of utilities.	Anne Chambers Pete Lynes	Ongoing. Voids/standing charges/Off contract supplies. Note cost to PFIs / Academies. Establishing a system to move Academies from LCC contract.	

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