

CLIMATE CHANGE STRATEGY FOR DUBLIN CITY 2008 – 2012



2009 – First Year Review

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“The Climate Change Strategy for Dublin City 2008-2012”, which was prepared by the Environment and Engineering SPC in association with Codema (City of Dublin Energy Management Agency) was adopted by Dublin City Council in May 2008.

Dublin City Council hosted a Climate Change conference – ‘the way forward for Local Authorities’ in partnership with the Department of Environment, Heritage & Local Government led, Change Campaign, in October 2008. The Strategy was launched at the Conference, as part of an overall aim to give local, national and international perspectives to help and encourage all local authorities to play an important role in tackling the adverse effects of climate change.

The Lord Mayor of Dublin signed the Eurocities declaration on Climate Change in October, 2008, which highlights the essential role played by cities in combating climate change.

The Climate Change Strategy for Dublin City builds on existing environmental policies, whilst responding to the challenge of climate change by primarily reducing our CO₂ emissions, through a cross cutting approach that includes specific actions, targets and performance indicators in key areas such as;

- Energy
- Planning
- Transport
- Waste management
- Biodiversity

CO₂ is the greenhouse gas that has the strongest effect on climate change and comes mainly from the combustion of fossil fuels for energy use. Dublin City Council, as a major employer and consumer in the Dublin region recognises it’s influence on local, regional and national policy and has already taken a pro-active approach to sustainable energy through the preparation of an Action Plan on Energy for Dublin, which is currently at public consultation stage.

The Environment & Engineering SPC requested a review of the Climate Change Strategy at it’s meeting in May, 2009. To prepare this review, each Department in the City Council assigned a staff representative to report on progress on the commitments within the Strategy and the attached spreadsheet (Appendix II) outlines details of the actions taken to date.

The actions detailed give priority to adaptation strategies that initiate, modify and enhance existing policies rather than solutions that require new funding/staffing. The intention is for the strategy to define immediate and practical steps for direct action by Dublin City Council, with timetables and targets. Therefore a limited

number of indicators are selected in the first instance under 12 headings and baseline data has now been identified for these (for 2008), which will allow us to track our progress, as part of the implementation of the Strategy and these are listed in Appendix I.

Key achievements from the Strategy include;

1) Technological change:

Large scale implementation of new technologies to reduce leakages and prevent flooding such as Spencer dock restoration project have been undertaken in conjunction with smaller scale technologies, such as the use of Low energy bulbs, motion sensors, telephone conference video technology, replacement of boilers, insulation of buildings and purchase of more energy efficient vehicles.

Six new housing developments were also completed across the city in Summer of 2009 which all incorporate some energy saving aspects including, solar panels, sedum roofs – for insulation, water butts, food digester, sheeps wool insulation in excess of the minimum standard.

Environmental sustainability has also become a key feature of recent projects undertaken by the Council such as Father Collins Park, Donaghmede, which was opened by City Council in May 2009 and has the capacity to be entirely self sufficient through the use of energy generated from five wind turbines in the park, which supply the energy that powers the park's lighting and water features.

2) Behavioural change:

New initiatives such as;

- a) Action at Work (promotes recycling of waste generated at work)
- b) Switch off Campaign (promotes switching off office appliances/lights when not in use in the workplace) as part of the Minus 3% every year project.
- c) Tap Tips which promote the role that our customers (both staff and external consumers) can play in reducing water usage

have brought about increased staff awareness of the challenges presented by climate change and promotion of a collaborative approach across the organisation in the areas of waste management and energy/water conservation. This awareness at work has led to staff submitting further energy saving suggestions and we will continue to work in partnership with Codema to implement these. In addition, staff have also commented that they are more energy aware at home.

3) Innovations:

Some examples of innovative initiatives, which can be both financially and environmentally positive for the Council are detailed below;

The award winning new turbine at the City Council's Vartry Water Treatment plant supplies 80 million litres of drinkable water to the Dublin Region each day, in addition to converting energy from the water flow into electricity to meet on site demand and supply surplus electricity to be sold to the National Grid. By displacing

existing energy usage with a renewable supply, there is a considerable benefit in reduction of CO2 emissions.

A number of our recreation facilities use UV systems to kill nearly all parasites in pool water which reduces the need and associated cost for chemicals to keep the water clean.

The Drainage division converts waste sludge into agricultural fertiliser called biofert, thus reducing the need to dispose of the waste sludge and promoting the use of a natural (non chemical) fertiliser.

The Dublin City Freetrade website has resulted in over 22,800 items being reused rather than being thrown away, since the launch of the site in August 2006. Given the success of the site, it is now planned to extend it to a National Platform in early 2010. Busybees is a continuation of the innovative Sunflower Recycling project – which prepares and resells furniture and Dublin City Council through the bulky household collections in 2008 made 36 tonnes of material available to Busybees for resale in their furniture shops. From March to August 2009, 23 tonnes of material was also provided.

4) Public and School education:

A total of 226 Dublin City schools are currently registered with An Taisce and are working on various stages of the green-schools programme, which promotes and acknowledges environmental education and management systems within schools. In addition, the Waste Division is currently developing Energy Smart & Green Homes Programme for Communities and the Green Business Officer is also involved with prevention awareness raising across a broad range of enterprises within the city.

The Tap tips website and leaflets provide information, including a specific children's section, which explains the need to conserve water and guidance on easily understood tips to help residents, including children and businesses to reduce water consumption within the home, garden, work and at school. The Water at Schools Programme also aims to raise awareness of water conservation matters through workshops and information packs and it links in to the green schools programme. Free Hippo bags, water butts and guidance on possible water conservation measures are also offered to Management of schools, as part of this process.

BIKE START was launched in September 2009 and comprises of four levels of cycling training that will provide safety awareness and practical cycling skills to senior primary school children to encourage them at an early age to become involved in cycling. Staff from the Roads Safety Unit will deliver the programme to primary schools throughout Dublin

5) Strategic change:

The need to continue to control, manage and reduce carbon dioxide and other greenhouse gas emissions will be incorporated into our core business, through the inclusion of this key objective in the forthcoming Corporate Plan. In addition, sustainable design, promotion of cycling and pedestrian facilities and energy

efficiency in building is promoted through the inclusion of a number of mechanisms in the forthcoming Development Plan.

A considerable amount has already been achieved since the launch of the Climate Change Strategy for Dublin 2008-2012 and it is expected that even greater progress will be made when the Action Plan on Energy for Dublin is adopted in early 2010. We will continue to promote the actions within the Strategy and provide measurements each year for the agreed indicators, which will demonstrate Dublin City Councils commitment to Staff, our Elected representatives and the general Public.



Appendix I

Baseline indicators to track progress on implementation of
Climate Change Strategy

Climate Change Indicators for Dublin City 2008

	Indicator	Units of measure	Quantity	Year
1	Total CO₂ Emissions	Tonnes CO ₂ /capita/yr	9.9	2008
2	DCC Renewable Energy share Total share of renewable energy for social housing, public buildings and installations, including traffic	% of DCC consumption	19%	2008
3	District/group heating units Number of social housing units, public buildings and community centres connected to district and group heating systems , assessed against the annual target	No of connections	2,430	2008
4	Combined Heat & Power (CHP Units) Number of CHP units within the private housing and commercial sectors, assessed against an annual target	No of installations	31	2008
5	A & B Rated buildings – residential Number of A and B rated buildings within the social and private residential sector and as a percentage of the building stock	% of all buildings	5.5%	2008
6	A & B Rated buildings – commercial/public buildings Number of A and B rated buildings within the commercial and public buildings sector and as a percentage of the building stock	% of all buildings	<1%	2008
7	Pedestrians & cyclists Number of pedestrians and cyclists crossing the canals, as measured by the annual 'cordon' survey	Persons crossing canals	26,377	2008
8	Dublin Bus & LUAS Number of passenger-trips on Dublin Bus and LUAS per year	Passengers trips/year	171m	2008
9	Organic waste diverted Tonnes of (methane producing) organic waste diverted from landfill	Tonnes/year	8,287	2008
10	Recycled waste Share (%) of waste that is recycled	% of waste recycled	31.9%	2008
11	Tree canopy cover Tree canopy cover within the city area to contribute to carbon sequestration (no of trees)	No of trees	160,000	2008
12	Zoned land Z9, Z11, Z12 The total amount of Z9, Z11 and Z12 lands zoned in the Dublin City Development Plan (hectares)	Hectares	2,882	2008



Appendix II

List of actions taken to date on commitments contained in Climate Change Strategy

Heading in Strategy	Theme	City Council Department update:	Action to be taken by Dublin City Council & Update
General	1	National Support	Identify areas for support from National Government, which will support and facilitate the delivery of actions set out in this Strategy
		City Architects Department:	Update: a) This Department has advised DoEHLG of the need for funding to allow the energy upgrading of existing social housing as outlined in the Energy Action Plan. b) Development Plan requires all new housing to achieve Building Energy Rating (BER) of A3. The need for additional funding to cover this cost has been raised with DoEHLG.
	2	Plans/Studies/Policy Documents	Climate change proof the Dublin City Development Plan and other plans, studies, policy documents
		Environment & Engineering Department:	Strategic Planning and Project Management Division Update: Water Services Plan 2009 prepared and to be included under Strategic Environmental Assessment (SEA) of Development Plan
		Environment & Engineering Department:	Fire Brigade Department Update: Green Plan for Kilbarrack Fire Station has been prepared which aims to promote energy and water conservation in Dublin Fire Brigade and subsequently throughout Dublin City Council and our local community. It also aims to promote recycling and waste reduction by staff .
		Ballymun Regeneration Limited:	Update: All Ballymun Regeneration Limited (BRL) development plans are built upon the principles of the Ballymun Masterplan, Energy and Environmental Review (EER), the Ballymun Biodiversity Plan and the local Waste Management Strategy, which contains climate change mitigation measures.
		Planning & Economic Development Department:	Update: The Draft Dublin City Development Plan has been prepared with sustainability as the over-arching philosophy, informing and imbuing the vision, core strategy and all policies, objectives and standards of the Plan. It is also relevant to note, that for the first time, the plan includes a series of sustainability indicators and a commitment for an annual monitoring report, to ensure that it is being implemented effectively and that the city is moving toward sustainability. In line with the principles of sustainability, there are numerous policies in the plan that will reduce the city's carbon footprint and target climate change, for example, policies relating to consolidation and a compact city, transport, sustainable infrastructure, greening the city etc, whilst there are also very specific policies on climate change at a city and city region level. In addition, the Development Plan states that Sustainability Tool-kits will be prepared for all Local Area Plans and Schematic Plans, thus ensuring that all lower-tier plans take account and have regard to climate change factors.
	3	Energy Action Plan	Prepare and Adopt an action plan on Energy for Dublin
		All City Council Departments:	Update: Dublin City Council, in association with its energy advisor, Codema, has prepared an Energy Action Plan for Dublin. The main aim of the Action Plan is to analyse the potential for reducing Dublin's carbon footprint and set out a schedule of concrete actions for a more sustainable energy use in the future. The Action Plan is currently undergoing a Strategic Environmental Assessment (SEA) and will be available for public consultation as part of this process.
		Housing & Residential Services Department:	Update: The Housing and Residential Dept. has arranged with Codema to prepare an Energy Action Plan specifically for the City Council's social housing stock. The plan will be completed by the end of the year.
	Ballymun Regeneration Limited:	Update: Ballymun Regeneration Limited have been invited by Codema to participate in the working group which will facilitate the implementation of the Energy Action Plan for Dublin.	
Energy	4	District Heating	Map areas that can be served by the proposed district-heating network to be used by planners and for inclusion in the next City Development Plan
		Environment & Engineering Department:	Update: The area to be served by the initial district heating system has been identified and an initial customer base secured. Planning Department will be made aware of progress in this area and they can therefore seek to ensure that future developments connect into the proposed district heating pipeline.
	5	District Heating	Develop, publish and disseminate technical and operational guidelines for district heating in Dublin to inform both planners and developers to ensure compatibility between different schemes
	Environment & Engineering Department:	Update: Following the establishment of a Dublin District Heating Co, a Strategic Business Plan will be completed which will identify key components for new customers to connect to the proposed district heating pipeline.	

Heading in Strategy	Theme	City Council Department update:	Action to be taken by Dublin City Council & Update
Energy	6 Renewable Energy		Continue to pioneer and promote best practise in renewable energy through the Council's own projects and operations
		Environment & Engineering Department:	Drainage Division Update: Generation of 3 Megawatts of electricity from Biogas has been achieved at the Ringsend Wastewater Treatment Works.
		Environment & Engineering Department:	Water Division Update: A new turbine at the City Council's Vartry Water Treatment Plant near Roundwood, Co. Wicklow was commissioned in November 2007 and has been in operation since early 2008. The Plant supplies 80 million litres of drinkable water to the Dublin Region every day and the new turbine converts energy from the water flowing into the plant, into electricity. This electricity powers the plant and excess energy is sold to the National Grid. The turbine received a grant from Sustainable Energy Ireland and the project was short-listed for an award by Sustainable Energy Award 2008 and was Highly Commended in the Renewable Energy Project category.
		Culture, Recreation & Amenity Department:	Update: Both pools in Ballymun Leisure Centre and Finglas Leisure Centre have pool blankets to reduce the heating and cleaning requirements of the pool. U.V. systems which kill nearly all parasites in water are located in the plant room of each leisure centre and are used during the water filtration process. A computer tests the water for chemicals after it has been passed through the UV system and determines exactly how much chlorine or acid to add to the water to keep it clean.
		City Architects Department:	Update: 1) York Street housing is an example of best practice in energy conservation and consists of sixty-six units. It is one of the first Dublin City Council housing schemes to incorporate several new, innovative and most importantly, sustainable energy efficient concepts. Some of the concepts include solar panels for the provision of constant hot water for the residents, sedum roofs which have exceptional insulation properties and have excellent rainwater retention properties (rainwater is collected in twelve stainless steel water butts for use by the residents in the courtyard area) extensive use of sheep's wool in external walls for insulation purposes, encouragement of organic waste recycling by the provision of a food digester on site, provision of glazed balconies with sliding glass panels, which trap solar heat, for use as winter gardens in winter- time and as extra living space in the summer. 2) Raleigh Square is a housing scheme designed to be Carbon Neutral and details have been sent to the DoEHLG seeking funding approval. 3) All new build projects undertaken, will meet or exceed the requirement for renewables in Building regulations Part L (conservation of fuel and energy) and we are involved with CODEMA in developing a Housing Energy Action Plan, which will reduce energy use and CO2 emissions in housing stock by 3% per year.
		Environment & Engineering Department:	Fire Brigade Department Update: Green Plan for Kilbarrack Fire Station promotes best practice in renewable energy
		Finance Department:	Update: Finance Department Team Development Plan 09 includes Sustainability as a key objective.
		Information Systems Department:	Update: The following initiatives have been undertaken by the IT Department; 1) The use of Server virtualisation technology to reduce the physical number of servers required to provide the ICT service. To date 85 servers have been virtualised. Using the Green IT Calculator this represents an annual saving of 562,614 kWh of energy and 342,220 kg reduction in CO2 emissions. 2) Reduce power consumption at the desktop (on average 58% of staff leave their PC on at night) by running a script to force PC's into Standby mode which would result in a nightly saving of 63,501 watts. The PC Script is in operation at the moment for everyone on the Local Area Network, which includes the Civic Offices, Marrowbone Lane, Rates Office, Smithfield etc. and all larger sites which are connected to the DCC system by a Fibre Connection. It is not in operation yet in the smaller sites which are currently connected to us over leased lines e.g. Depots, smaller area offices.
		Ballymun Regeneration Limited:	Update: Ballymun Regeneration Limited's policy for environmental and energy performance through the Energy and Environmental Review (EER), promotes best practice in all developments and operations. Under the EER, (BRL's Energy & Environmental Policy) as a minimum requirement 20% of heating, cooling, electricity and domestic hot water requirement must be sourced from sustainable sources for all new developments. As an enhanced performance requirement 40% of heating, cooling, electricity and domestic hot water requirement must be sourced from sustainable sources for all new developments. Sustainable sources as referred to here include solar collectors, solar pv, wind, biomass and geothermal energy.
	7 Renewable Energy		Switch to renewable energy for our own electricity supply as far as is practical within the established procurement process
		Environment & Engineering Department:	Electrical Services Division Update: In our procurement process for purchasing electricity we give a weighting to favour suppliers of electricity from renewable resources. This process has just been completed and approximately 35% of the electricity for the coming year under this procurement process will be purchased from suppliers using renewable sources.
		Ballymun Regeneration Limited:	Update: The Energy and Environmental Review (EER) promotes the use of renewable energy technology where feasible and requires the consideration of renewable energy production prior to development. Ballymun Civic Centre switched to Airtricity for primary electricity supply in June 2009. Under the EER, (BRL's Energy & Environmental Policy) as a minimum requirement 20% of heating, cooling, electricity and domestic hot water requirement must be sourced from sustainable sources for all new developments. As an enhanced performance requirement 40% of heating, cooling, electricity and domestic hot water requirement must be sourced from sustainable sources for all new developments.

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Energy	8 District Heating		Make sure that the development of a district heating system is not dependent on the planned waste incineration plant, but will take place with or without the plant
		Environment & Engineering Department:	Update: A draft Dublin District Heating Company Strategic Business Plan has been recently completed, which aims to procure sources of waste heat produced within Dublin and re-use that heat to provide sustainable commercial district heating services to Dublin.
	9 Energy efficient Lighting		Install energy efficient outdoor and indoor lighting and convert all traffic lights to LEDs which are much more energy efficient than conventional light bulbs
		Environment & Engineering Department:	Electrical Services Division Update: A) a project to install more energy efficient lighting in the Ilac car park is in progress . B) a project to replace inefficient lighting in the Civic offices with more energy efficient types is at an expression of interest stage. C) sensors have been installed in School House Lane car park to switch off lights when not required, in order to reduce energy consumption at night.
		Roads & Traffic Department:	Update: Over 30% of all signal lights have been converted to LED and LED's are used to replace faulty bulbs as necessary, so that all signal will be LED in the future. DCC Traffic ITS Division has won an SEI award for this project.
		City Manager's / Corporate Services Department:	Update: Corporate Services & Civic Offices: A grant up to a maximum of €80,000 has been approved by Sustainable Energy Ireland (SEI), Wilton Place, Dublin 2 under the SEEEP programme for a project, called Downlighters Replacement Programme, in the Civic Offices. Tenders have been received and are currently being evaluated. Implementation of the work is dependent on securing a suitable tender and being able to undertake the work within the timeframe set by SEI. Sensor lighting is in place in Blocks 3 & 4 in Civic Offices in both the public areas and the central walkways of each floor. Mansion House: A survey was carried out by Dublin City Council Electrical Department on the building in 2008 and low energy lights were installed in the WC areas. Franchise Section, Ormond Building: Communal spaces, such as corridors, lobby and toilets have movement sensitive lighting installed which only activates when required.
		Ballymun Regeneration Limited:	Update: The Ballymun Regeneration Limited Energy and Environmental Review makes provision for the use of LED lighting in all new residential and commercial developments. Under the EER, as a minimum requirement all new all new Buildings to be specified using either CFL and/or FLT fittings and bulbs and no tungsten filament bulbs to be utilised within Buildings. As an enhanced performance requirement LED lighting to be used in at least 15% of fittings.
	10 Energy Conservation Officer		Appoint an Energy Conservation Officer to drive forward energy conservation throughout the City Council through "Action at Work" type programme
		All City Council Departments	Update: Not yet appointed but the Energy Action Plan is currently at Public consultation stage
	11 Action at work		Nominate a staff member as Energy Liaison Officer in each department to ensure that best practices in energy efficient are adopted and that the "Action at Work" programme is implemented
		Environment & Engineering Department:	Electrical Services Division have appointed 1 officer / Survey & Mapping Section have appointed 2 Energy Liaison Officers
	City Manager's / Corporate Services Department:	Update: Energy Liaison Officer appointed for 3 Palace Street/Civic Offices & City Manager's Department has appointed Energy Liaison Officers in the following Offices: Secretariat / City Hall, Franchise Section and the Mansion House. The Corporate Services Department is currently working with Codema to draft a Sustainable Office Plan for 3 Palace Street.	
	Finance Department:	Update: The Finance Department commissioned a Sustainable Office Strategy. Within Motor Tax, Green Teams have been established to highlight the Codema findings regarding energy conservation and to raise the awareness of the sustainable office campaign and examine the Action at Work programme in the 4 Motor Tax Offices.	
	Human Resources Department:	Update: The HR Department has appointed an energy liaison officer.	
	Ballymun Regeneration Limited:	Update: The Ballymun Regeneration Limited Environmental Officer, is implementing the Action At Work Campaign and is assisted by a multidepartmental 'Green Team' with representation from BRL, Dublin City Council and other building occupants; Health Service Executive & Hochtief. The Ballymun Regeneration Limited Environmental Officer has responsibility for promoting energy conservation within the organisation. The Action at Work Campaign was fully adopted in 2008 and has been expanded to include other environmental aspects including energy and water conservation.	

Heading in Strategy	Theme	City Council Department update:	Action to be taken by Dublin City Council & Update
Planning	12 Energy Acton Plan		Carry out an economic analysis of the cost of (a) stabilising Dublin's total CO2 emissions at present levels and (b) reduction of CO2 emissions by 3% per year, as part of the Action Plan on Energy for Dublin.
		Codema:	Update: This analysis has been undertaken and the results are presented in the draft 'Dublin Sustainable Energy Action Plan - Version 1.1', 13th May 2009, which was noted by Dublin City Council on 22nd June 2009. (copies available on website)
		Ballymun Regeneration Limited:	Update: The Ballymun Regeneration Limited Energy and Environmental Review process included a cost analysis for reducing CO2 by 40% in new developments to ensure the stipulations within the policy were not financially restrictive. No analysis has been carried out on existing housing stock in Ballymun by BRL as yet.
	13 Energy use		Set an overall average target of minus 3% per year reduction in total energy end-use for the Council's own operations, giving total reduction of 33% by 2020, in line with the national targets and exceeding the requirements of the EU Energy End-use and Energy Services Directive
		Environment & Engineering Department:	Drainage Division Update: 3% reduction in energy use for pumping wastewater in 2009 has been achieved and an additional 3% reduction has been set as the goal for energy reduction for 2010. Fleet Management Division Update: With more than 900 fleet vehicles on the streets of Dublin each day, Fleet Management Services is encouraging fleet drivers to decrease their carbon footprint by 3 per cent by following the steps outlined in the 'eco friendly driving campaign'
		City Architects Department:	Update: City Architects encourage energy efficiency in the design of all new build and refurbishment projects to assist with achieving the 3% reduction.
		Finance Department:	Update: Initiating a behavioural campaign in conjunction with minus 3% as part of a Sustainable Office Strategy.
		City Manager's / Corporate Services Department:	Update: Mansion House: A Conservation Report which recommends the upgrading of the Mansion House Building to increase energy efficiency was presented to the September City Council Protocol Committee for consideration.
		Ballymun Regeneration Limited:	Update: The 3% per year reduction in total energy end-use target has been incorporated into the Ballymun Civic Centre Action at Work / Green Team Campaign. Total electricity consumption (heating and lighting demand) for year to date (October 2009) has reduced by 64,592 units which is a 8% reduction on 2008 total electricity consumption. Further measures are planned to ensure at least 3% further reduction in 2010.
		Planning & Economic Development Department:	Update: Action 2.7 of the Economic Development Action Plan for the Dublin City Region sets out to "Build on existing environmental advantages and emerging high tech and biotech innovation clusters to identify how the city region can support the growth of Clean Technology Industries". To implement this, it is proposed to "Establish a cross-agency working group to identify and agree priorities". This should enable energy consumption reductions as a result.
	14 Energy Consumption		Reduce the energy consumption across all Council owned social housing and within its own facilities through education and refurbishment. As a part of the Energy Action Plan, detailed audits of DCC's buildings will be carried out. In the audits opportunities of energy efficiency and use of renewable energy will be delivered.
		All City Council Departments	Update: Codema Switch Off Campaign: This was initiated on 15th - 16th April 09. Dublin City Council Staff are reminded on a regular basis to shut down their PC's each evening as opposed to simply logging off in order to conserve energy. Earth Hour: Dublin City Council was one of the first European cities to support Earth Hour when it participated on March 29th 2008. DCC participated once again on 28th March 2009 to ensure all non-essential lights in Council buildings were switched off.
		City Architects Department:	Update: 1) The aim set in all refurbishment of housing stock is C1 or better (C1 is a Building Energy Rating, best possible is A1, all new houses are required by Dublin's Development Plan to achieve A3, in refurbishment our housing stock City Architects advise where possible to bring the houses up to C1). 2) auditing energy performance of social housing as part of Housing Energy Action Plan with CODEMA. 3. Building Energy Display certificates for all DCC public buildings over 1000 sq.m. are being prepared (by CODEMA, with assistance from City Architects.)
		City Manager's / Corporate Services Department:	Update: Civic Offices: Facilities Management undertook an initial energy audit of Civic Offices on 17.02.09. A subsequent energy audit took place on 19th May 2009 to identify if there was evidence of behavioural changes, as a result of the Switch off campaign. The surveys concentrated on appliances in the Civic Offices building, which were left fully on or in stand-by mode and whether lighting in the Civic Offices building had been switched off where possible. The amount of appliance energy in total had decreased by 13% between the two surveys. Display Energy Certificates have been obtained for several buildings, including the Civic Offices. The Department is leading a small team compiling the data for all DCC buildings over 1,000 sq.m. Mansion House: The heating system for the building is from gas fired boiler plant located within the plan room at basement level. However, negotiations are ongoing with a new operator of a Combined Heat and Power (CHP) unit burning biofuel. All Emersion Heaters are insulated.
		Environment & Engineering Department:	Fire Brigade Department Update: In conjunction with the Corporate Partnership, this Department commissioned an Energy Audit of Kilbarrack Fire Station in June 2008. Electrical Services Division Update: The Ringsend Wastewater Treatment Works is virtually self sufficient in its electricity requirements as it uses methane gas produced, as energy to run the plant.
		Ballymun Regeneration Limited:	Update: Ballymun Regeneration Limited works with building maintenance, Dublin City Council social supports, Sustainable Energy Ireland and the local Neighbourhood Council in promoting energy conservation. Educational material and funding information has been published and disseminated widely through local networks and bulletins.

Heading in Strategy	Theme	City Council Department update:	Action to be taken by Dublin City Council & Update
Planning	15 Solar Thermal panels		Promote the use of solar thermal panels in both private and public housing.
		City Architects Department:	Update: 1. Solar thermal panels are the preferred technology to meet the renewables requirement of Building Regulations Part L in new build projects undertaken through this Department
		Planning & Economic Development Department:	Update: Dublin City Council Planning Department actively promotes the use of green technology and energy efficiency in buildings. The current development plan contains policy on the use of renewable energy, including solar and other energy sources and even greater emphasis on sustainable design criteria has been included in the forthcoming Draft Development Plan 2007-2011. The Planning and Development, Regulations 2007 & 2008 give effect for new exempted development provisions for certain micro-renewable energy technologies in the domestic sector (2007 Regulations) and renewable technologies for industrial buildings and business premises including wind turbines, met masts, combined heat and power plants (CHP), solar panels and biomass boiler units, subject to certain conditions, across each of the sectors. Dublin City Council Planning Department advises and creates awareness of these new exempted development provisions.
	Ballymun Regeneration Limited:	Update: Ballymun Regeneration Limited's Energy Environmental Review promotes the use of Solar Thermal and Solar Photovoltaic (PV). Two key projects pioneering solar panels in Ballymun are the Emerald Housing Project and The Rediscovery Centre	
	16 Pilot passive house		Carry out a pilot demonstration project for Passive House Standard Housing in one of the new Social Housing schemes
		City Architects Department:	Update: City Architects has submitted a funding proposal to the DoEHLG for Raleigh Square, which is a project designed to provide about 25 apartments for older people. The intention is that the dwelling will be insulated to a standard much higher than required by building regulations and that all the electricity and heating needs will be provided from a Combined Heat and Power system burning biofuel. The apartments will thus emit no net Carbon Dioxide (Carbon Neutral). The proposal was submitted to DoEHLG for funding under their programme to encourage Low Carbon Housing. Funding approval has not yet been received.
		Ballymun Regeneration Limited:	Update: Ballymun Regeneration Limited are currently preparing tender documents, for a remaining unit in an existing scheme to be built to a passive house standard. In the BRL housing scheme Poppintree 1, one unit was left unfinished by the original contractor. This unit is now being completed as a best practice and enhanced performance unit (named Poppintree 1A) with the inclusion of additional energy and environmental features including insulation to BRL phase 4 specifications, solar power, passive stack ventilation and grey water recovery. This unit does not exactly follow the PassivHaus specification but is based on PassivHaus basic principles, with the aim of testing and troubleshooting how these principles and new energy and environmental technologies can be integrated into BRL phase 4 specification.
	17 Sustainable communities project		Target and promote a carbon neutral Sustainable Communities demonstration project in each of the five city Areas
		Planning & Economic Development Department:	Update: The Planning Department will liaise and work in conjunction with each of the Area Managers, City Architects and Codema to promote awareness of sustainability throughout communities in the city and to deliver on a carbon neutral demonstration project in each of the City Council's Five Administrative Areas. The timeframe is to be agreed by an Inter-departmental Team. The Area Managers / City Architects are likely to be the Lead Departments to Determine the timeframe. There is an objective in the proposed draft development plan (SI053) 'To seek to initiate and support carbon neutral demonstration projects in conjunction with local communities' – So it would be realistic to state a timeframe, over the life of the next development plan i.e.. over a six year period – 2011-2017
		Ballymun Regeneration Limited:	Update: Ballymun Regeneration Limited are currently working with Trinity College Dublin and TrinityHaus on the Low Carbon Society programme which will carry out research to identify solutions for low carbon living.
	18 Sustainable Planning		Include good information in all planning projects so that people are willing to live in new forms of housing, be more energy conscious, conserve water, recycle and be more litter conscious, and use public transport
		City Architects Department:	Update: New residents are provided with full information on how to operate systems provided, as a matter of course. These include highly efficient heating systems, solar collectors, rainwater collection and on-site composting.
		Planning & Economic Development Department:	Update: All recent local plans such as the Phibsborough / Mountjoy Local Area Plan (LAP), the Liberties LAP and the Rathmines LAP place a strong emphasis on the principles of sustainability and include specific guidance on sustainable site design, sustainable densities, energy efficiency, green roofs and sustainable urban drainage systems (SUDs). These plans also include guidance on the creation of sustainable residential communities with a variety of housing types to cater for whole-life communities and a range of local services with access to public transport and attractive walking / cycling routes. These local plans provide area-specific guidance, whilst the principles of sustainability are integral to the higher-level Development Plan. In addition, the Planning Authority is also undertaking a review of the Council's 'Taking in Charge Policy' in order to effectively cater for implementation of sustainable urban drainage systems (SUDs) and to respond positively to the provisions of the Multi-Unit Developments (MUDs) Bill. The effective control of management companies will enhance the attractiveness of apartment living and progress the consolidation of the city.
		Ballymun Regeneration Limited:	Update: The Ballymun Masterplan and subsequent Energy and Environmental Review, provides important information relating to best practice sustainable living. In addition the Community and Family Training Agency (CAFTA) transition programme, delivered to residents when moving to their new homes, provides key messages in relation to electricity and water conservation, waste management and environmental sustainability.

Heading in Strategy	Theme	City Council Department update:	Action to be taken by Dublin City Council & Update	
Planning	19 Sustainable Planning		Promote overall sustainability in developments and not only focus on individual areas	
		Planning & Economic Development Department:	Update: The promotion of sustainable planning is an on-going and continuous, equally applicable to forward planning and development management process. Furthermore, Sustainability is the over-arching philosophy of the Proposed Draft City Development Plan. Sustainable Planning imbues the vision, core strategy, all policies, objectives and standards in the Plan. There is also for the first time a set of sustainability indicators for annual monitoring to ensure that the implementation of the plan is in accordance with the principles of sustainability.	
		City Architects Department:	Update: Consideration is always given to sustainability in design of schemes. Most are inherently sustainable - brown field sites, good transport links, dense development. Some projects, such as York Street, have gone further, including materials recycling, low-energy concrete, renewable energy for heating, rainwater collection, waste sorting on site and composting on site.	
		Ballymun Regeneration Limited:	Update: Global Action Plan on behalf of Ballymun Regen. delivers environmental awareness programmes and implements sustainability action projects at a local level.	
	20 Energy Use in the Residential and Commercial Sectors			Influence private builders to improve the design standards of new buildings through the variation of the Dublin City Development Plan 2006-2011
		City Architects Department:	Update: City Architects have advised Planning on the energy performance standards to be demanded of new buildings of all types in the Development Plan 2011 - 2016	
		Planning & Economic Development Department:	Update: The Planning Authority will continue to promote sustainable site design and energy efficiency in buildings at the earliest possible stage in the development management process by way of the Section 247 Pre-Application Consultation Process. It will also promote energy efficiency in accordance with the sustainability principles and standards as set out in the development plan and any local area plan. Variation 22 of the current Development Plan (2005-2011) pertains to the insertion of a policy on energy efficiency in the residential chapter (November 2007). The Policy (Policy Residential 20) states as follows: That Dublin City Council will seek to promote more sustainable development through energy end use efficiency, incorporating the use of renewable energy and improved energy performance of all new building development throughout the city. The Proposed Draft Plan promotes sustainable design through a number of mechanisms, including site development standards for sustainable building design, policies on renewable energy sources and energy efficiency with the requirement for an energy statement to accompany large applications (typically 50 Units or 5,000 sq.m), and guiding principles on 'Greening the City'. These guiding principles relate to Sustainable Site Design, Sustainable Urban Drainage Systems (SUDs), Green Roofs, Green Networks & Flood Risk Areas.	
		Ballymun Regeneration Limited:	Update: All new developments in Ballymun are required to meet the targets set out in variation 22 of the Dublin City Development Plan 2006-2011. The Ballymun Regeneration Limited Energy and Environmental Review outlines a range of measures which private developers can implement to reach these targets and facilitates improved design standards.	
	21 Energy Use in the Residential and Commercial Sectors			Introduce requirements demanding highest energy saving standards in planning permissions for alterations of existing buildings
		Planning & Economic Development Department:	Update: Energy saving measures and energy ratings are more appropriately dealt with under the Building Regulations, Codes and Bye-Laws. However, the planning department will use every opportunity during pre-application consultations to encourage high energy efficiency. The Building Regulations are steadily enhancing the thermal performance standards of new and refurbished buildings.	
		Ballymun Regeneration Limited:	Update: Ballymun Regeneration Limited are working with the City Development Plan team to ensure that requirements for developments relating to energy use are introduced in the most appropriate way.	
	22 Energy Use in the Residential and Commercial Sectors			Investigate new financial support mechanisms for delivering local advice, guidelines and information to building owners in order to encourage refurbishment of the existing building stock (commercial and residential), as these services cannot be delivered at local level at zero cost
Planning & Economic Development Department:		Update: The Planning & Economic Development Department will investigate financial support mechanisms to deliver information, local advice and prepare guidelines to encourage owners of existing buildings to improve energy efficiency of such buildings. Over the next 12 Month Period (Nov 09 to Nov 10) and as part of the Lord Mayor's Commission on Employment which relates to sources and access to funding for business, entrepreneurship and finance in the context of the potential growth areas such as green technology. The investigation of potential support mechanisms will be undertaken in conjunction with Codema and Sustainable Energy Ireland (SEI). The Planning Authority will also utilise opportunities at pre-planning application consultations to promote the retro-fitting of green technology in the existing building stock.		
Ballymun Regeneration Limited:		Update: Ballymun Regeneration Limited collate and disseminate information relating to grant assistance, such as Sustainable Energy Ireland (SEI) funding, to the local business and residential community. As part of a local area Energy Action Project, we are also currently liaising with Dublin City Council North West Area Office, SEI and Energy Action Ltd. in relation to refurbishment of existing building stock.		

Heading in Strategy	Theme	City Council Department update:	Action to be taken by Dublin City Council & Update
Planning	23 Energy Use in the Residential and Commercial Sectors		Develop a programme for small businesses to help them be more energy efficient, as 96% of Dublin businesses are small and medium enterprises
		Planning & Economic Development Department:	Update: The energy efficiency of small businesses and green/clean technology in general will be considered by the Lord Mayors Commission on Employment, which was recently established. Green Technology is identified as a potential growth area in the Issues Papers for the Lord Mayor's Commission on Employment. It is considered that the promotion of green technology also relates to another key issue of how to make Dublin more attractive and competitive for investment. It is the intention, at this stage, that a position paper and interim report on identified issues will be prepared over the one-year period.
		Ballymun Regeneration Limited:	Update: The 'Rediscover Business' initiative, implemented in 2008, assists small companies to reduce their overall environmental impact and earn financial savings through the implementation of a simplified Environmental Management System (EMS). The EMS programme is primarily focused on energy use, water use and waste reduction. The Rediscovery Centre is a BRL initiative. This and all other associated projects are co-ordinated and managed by BRL Environmental Team.
	24 Energy Use in the Residential and Commercial Sectors		As part of the programme to reduce leakage and conserve drinking water, continue to replace defective mains through the Dublin Region Watermains Rehabilitation Project
		Environment & Engineering Department:	Strategic Planning and Project Management Division Update: The Dublin Region Watermain Rehabilitation Project has rehabilitated 51 Km of mains and saved 7.9 Million litres of water every day.
	25 Energy Use in the Residential and Commercial Sectors		Promote water conservation through the Water Conservation Officer, the Tap-tips campaign and implementation of the 'Bye-laws for the Management of Water Services and Conservation of Drinking Water 2003'
		Environment & Engineering Department:	Water Division Update: A) The Water at Schools Programme is ongoing and aims to raise awareness of water conservation matters through workshops and information packs and it links in to the green schools programme. Guidance on possible water conservation measures is offered to Management of schools. B) DCC's Water Conservation Policy is currently being rolled out in-house. Online water audit tool is being used and a website www.wateraudit.ie has been developed which has an online survey. The survey itself should be ready to go live in November 2009. Over the past two months it has been going through testing. The site will be rolled out first in DCC and will enable us to implement our own Water Conservation Policy. This will act as a pilot for the external roll out. It will then be trialled externally with a number of our non-domestic customer in Q2-Q3 2010 before being implemented across the rest of our non-domestic customers that use in excess of 5m ³ /day as per bye-laws. This will act as a pilot for roll-out to business in early 2010 and will help non-domestic customers meet requirements of Bye-Laws. Tap Tips website revamped in '08. A number of water saving devices are currently being trialled in Marrowbone Lane Offices including flush controls on urinals, waterless urinals, retro-fit dual flush toilets. A water conservation campaign was launched in the Summer of 2008 which promoted water conservation, especially during the summer by making simple changes in our daily routines to cut down on the volume of water we waste.
		City Manager's / Corporate Services Department:	Update: Secretariat / City Hall: As part of Dublin City Council's Water Conservation Policy, City Manager's Department is participating in a new water audit survey to enable us to monitor our waste usage, which will assist us to comply with Bye Laws for the Management of Water Services and Conservation of Drinking Water 2003. Water Services Division in conjunction with staff of this department carried out water audit / surveys of City Hall, Franchise Section Building (on Ormond Quay) and the Mansion House on 18th August 2009. Water saving devices may be installed in some locations based on results of the audit subject to the availability of finances. Franchise Section, Ormond Building: Use of low-flow, high efficiency toilets. 3 Palace Street: Dual-flush system in place in all toilet facilities.
		Ballymun Regeneration Limited:	Update: Ballymun Regeneration Limited have an effective communications & multimedia team which disseminates Dublin City Council educational and promotional material throughout Ballymun by means of the Ballymun Regeneration Limited newsletter, websites and open forums. In addition, water conservation is promoted through the Green Team campaign. The Green Team have disseminated the "It's a kind of Magic" and Tap Tips water conservation educational material to staff in the Civic Centre and have utilised stickers in toilets and bathrooms. A water usage survey was undertaken in 2009 with reporting to DCC Water Conservation Officer. As a consequence, a number of water efficiency and water reduction measures are being considered by Civic Centre facility management.

Heading in Strategy	Theme	City Council Department update:	Action to be taken by Dublin City Council & Update
Planning	26 Energy Use in the Residential and Commercial Sectors		Promote the use of "grey" water where appropriate
		Environment & Engineering Department:	Water Division Update: 1) Determining the feasibility of retro-fitting a rainwater harvesting system in Water Services Depot in Marrowbone Lane by third quarter of 2010. 2) Water butts for sale at cost price throughout the City. 3) Complimentary water butts offered to all schools in the City.
		Environment & Engineering Department:	Strategic Planning and Project Management Division Update: Included in Water Services Strategic Plan 2009 for Strategic Policy Committee (SPC) future discussion.
		Planning & Economic Development Department:	Update: The Planning Department is fully aware of the need for water conservation and especially so in the context of consolidating the city and the corresponding increase in demand for water supply. Accordingly, it is the intention that the new draft development plan will place an emphasis on sustainable infrastructure provision, including policies to maximise the beneficial re-use of water and to require the use of a range of Sustainable Urban Drainage Techniques (SUDS). The policies focus on water conservation with reference to a range of techniques such as rainwater harvesting, green roofs, swales, detention basins, ponds and wetlands. The Proposed Draft Development Plan, as prepared by the Manager and circulated to the Members on 12 October 2009 contains a series of policies as referred to above in Chapter 5 Connecting & Sustaining the City's Infrastructure. The Proposed Draft, with input or amendments from the councillors will be put on public display as the Draft Development Plan in December 2009. It is the intention and most likely, that these positive environmental policies will remain and appear in the new Draft Development Plan.
	Ballymun Regeneration Limited:	Update: The Ballymun Regeneration Limited Energy and Environmental Review includes as a minimum requirement examination of Grey water Recovery systems for all non residential buildings over 500sqm, and as an enhanced measure incorporation of a Grey water Recovery system for all residential and non-residential building stock.	
	27 Consolidation		Develop a more consolidated city as far as possible
		City Architects Department:	Update: All developments designed by City Architects are using brown-field sites within the city, are always developed to a sustainable density.
		Planning & Economic Development Department:	Update: The primary and strategic means available to the planning authority to implement the climate change strategy and reduce greenhouse gas emissions emanates from the over-arching policy to develop a more consolidated city and all other identified planning actions flow from this single over-arching policy aim. Consolidation through the creation of sustainable higher densities leads to a more compact city form, which in turn provides the critical mass and mix of uses needed for a viable, integrated public transport network; the creation of sustainable neighbourhoods with a range of services such as health, education, recreation and shopping in close proximity to homes; and the growth of local businesses, enterprise and employment centres. The promotion of higher densities, especially along public transport corridors, has the potential to reduce the urban footprint of the city and the region. It can also support and enhance the viability of a greater range of community infrastructure in urban neighbourhoods, thereby reducing the need to travel and leading to a reduction in emissions from the transport sector. Considerable progress has been made in recent years on the attainment of higher densities as evident from the annual Housing Land Availability Returns. The average residential density for the city is currently 135 Units per Ha (HLA, 2008), whilst circa 80 per cent of new build dwellings is in the form of apartments which enables consolidation and sustainable settlement patterns to a far greater extent than the traditional two-storey housing format. The planning authority recognises that green infrastructure is a necessary corollary of urban intensification and to this end, will seek to pursue a green infrastructure strategy in the new Development Plan, to provide for quality recreational, bio-diversity and carbon and water soakage areas as an integral part of the city's structure. There are a number of aspects of green infrastructure that contribute to the city's efforts on climate change mitigation and adaptation, for example, how it functions in terms of bio-diversity value, as a carbon sink and sustainable urban drainage system.
		Ballymun Regeneration Limited:	Update: The Ballymun Masterplan represents a strategy to consolidate and intensify urban development within the City and on it's fringes related to a public transport corridor.
	28 Transport		Take sustainable transport aspects into consideration when planning new housing area
		Roads & Traffic Department:	Update: Sustainability is taken into account in all Dublin City Council applications. Mobility management is standard procedure in assessment of all new development.
		Planning & Economic Development Department:	Update: The planning authority supports higher residential densities at locations in close proximity to high quality public transport. This approach is evident in relation to the emerging new residential communities at North Fringe, Pelletstown, Cherryorchard / Parkwest and Heuston South Quarter. All these new developing areas are served by high-quality rail based public transport.
		City Architects Department:	Update: Development sites in the City are usually well served by public transport due to the fact that most of these are located in an urban area. Provision is also made for cycling and safe walking in the area.
		Ballymun Regeneration Limited:	Update: The Ballymun Masterplan provided for a new town incorporating effective traffic management and integration of public transport.

Heading in Strategy	Theme	City Council Department update:	Action to be taken by Dublin City Council & Update
Planning	29 Transport		Influence the improvement of the public transportation network
		City Architects Department:	Update: City Architects are represented on the Transport 21 group, which influences the improvement of public transport.
		Roads & Traffic Department:	Update: Dublin City Council have promoted use of public transport and over the past ten years Public transport has risen to be just over 50% of the AM commuter peak, from 34%
	Ballymun Regeneration Limited:	Update: Ballymun Regeneration Limited has worked extensively with the Railway Procurement Agency and Dublin Bus to improve services and realise the delivery of Metro North.	
	30 Transport		Extend and improve the cycling and walking network
		Environment & Engineering Department:	Strategic Planning and Project Management Division Update: Sutton to Sandycove (S2S) north at detailed design stage.
		Planning & Economic Development Department:	Update: The City Development Plan 2005-2011 includes several policies that relate to the improvement of pedestrian and cycling facilities throughout the city, as part of an integrated approach to the management of movement to encourage modal change from private car use to more sustainable forms of transport. The Legible Dublin Project aims to create a high quality pedestrian environment in the city, whilst the launch of the Dublin Bikes Scheme will promote and facilitate cycling as a sustainable mode of transport. Also, it is the intention that any strategic green network for the city will provide for safe pedestrian and cycle routes. In addition, a variation to the Development Plan have just been initiated to extend the strategic cycle network from Sutton to Sandycove to Portobello.
		Roads & Traffic Department:	Update: Both modes are being examined by this Department to meet the targets as outlined in the Smarter Travel Policy.
		Ballymun Regeneration Limited:	Update: Ballymun Regeneration Limited are currently developing a safe cycling and pedestrian strategy as part of the Smarter Travel Programme. Sli Na Sliante routes have also been developed and were launched during 2008. Sli na Sláinte (Path to Health) is a walking route programme co-ordinated nationally by Irish Heart Foundation. In partnership with Irish Heart Foundation, BRL have developed a 1.5km Sli route in Ballymun and have promoted Sli links with neighbouring areas such as Santry Demense and the National Botanic Gardens.
	31 Transport		Facilitate the location of park and ride sites in new areas adjacent to good public transport.
		Planning & Economic Development Department:	Update: Park & Ride Sites are typically provided at out-town or edge of city locations adjoining high quality public transport stations, for example, at the Red Cow Luas Station. The underlying rationale being that at such locations there is effective intervention in the modal shift from private car to public transport. The provision of park and ride facilities at locations closer to the city centre would exacerbate unsustainable travel patterns and would also represent an inefficient use of urban land at the core of the metropolitan area. For these reasons, it is not the intention to provide park and ride sites within the City Council's Area.
		Roads & Traffic Department:	Update: Dublin City Council will continue to facilitate the provision of Park & Ride wherever possible, although suitable sites within the administrative area of the council are rare.
	32 Transport		Thoroughly evaluate the environmental aspects before giving planning permissions for shopping centres, specifically examining carbon miles for goods sold and proximity of the centres to their customers
		Planning & Economic Development Department:	Update: The current development plan makes provision for the sustainable provision of new retail floorspace or shopping centres. The hierarchy of retail centres corresponds closely to the hierarchy of settlement centres, which ensures the provision of locally accessible shopping for regular needs of communities within walking or cycling distance of residential areas and the provision of higher order shopping in larger centres that are well-served by high quality public transport. It is also policy that all new major retail floorspace provision is served by public transport. This approach ensures an emphasis on sustainability with a corresponding reduction in emissions from the transport sector. However, it is beyond the remit of the planning authority to govern the nature of goods sold in retail outlets with reference to carbon air miles.
		Ballymun Regeneration Limited:	Update: The development of a new Main Street mixed use town centre has been pivotal to the realisation of the Ballymun Masterplan and the development of Ballymun as a Prime Urban Centre.

Heading in Strategy	Theme	City Council Department update:	Action to be taken by Dublin City Council & Update						
Transport	33 Dublin City Council Fleet		Promote clean and efficient vehicles for the Dublin City Council fleet, through the procurement process and it will also demand these types of vehicles when procuring transportation services (taxi etc.). Due regard will be given to life cycle analysis which will apply where reliable information is available.						
		Environment & Engineering Department:	<p>Drainage Division Update: In association with Fleet Management Services, the Drainage Division have arranged for staff to receive driver training, in order to reduce fuel consumption in DCC vehicles.</p> <p>Fleet Management Division Update: Through the procurement process, Dublin City Council ensure that all practical measures are taken to reduce emissions and, in particular, that vehicles being procured meet the highest emission standards. This policy has been in place since 2007. When procuring heavy goods vehicles, we ask tenderers to quote for the latest emission standard vehicles. For example, in 2008 we procured four Mercedes Benz Atego 822 heavy duty vehicles for Public Lights. The emission standard applicable in Ireland at the time was Euro IV, however, we were aware Euro V standard vehicles were available in other countries such as Germany so we ask tenderers to quote for both Euro IV and Euro V standard vehicles. We procured the Euro V standard vehicles, although we were not obliged to do so. (Euro V standard vehicles only became compulsory in Ireland from 1 October 2009.) Euro V standard vehicles are cleaner than Euro IV standard vehicles. Reduced emissions are achieved by modifications to the vehicle's engine and adding a chemical called Adblue to the catalytic converter to treat the exhaust emissions. This means the vehicles have fewer pollutants, which has a positive effect on the environment and human health. The vehicles we have that are Euro 5 are as follows:</p> <table border="0"> <thead> <tr> <th>Vehicle Type</th> <th>Qty</th> </tr> </thead> <tbody> <tr> <td>Hoists, 8,500Kgs Mercedes Atego 822 4x2 rigid</td> <td>(4)</td> </tr> <tr> <td>Hook lifts, 32,000Kgs, Volvo FE9</td> <td>(4)</td> </tr> <tr> <td>Sweeper Dual, 15,000Kgs, Volvo FL Johnston VT-650</td> <td>(9)</td> </tr> </tbody> </table>	Vehicle Type	Qty	Hoists, 8,500Kgs Mercedes Atego 822 4x2 rigid	(4)	Hook lifts, 32,000Kgs, Volvo FE9	(4)
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	34 Travel Policy		Adopt a travel policy regarding journeys made by DCC employees on the behalf of DCC (conferences etc) that requires employees to chose sustainable modes of transport when possible						
	City Manager's / Corporate Services Department:	Update: Travel Unit: The DCC Business Travel Policy sets out a number of initiatives which enable the Travel Unit to obtain best value for money and reduce the harmful effects which travel may have on the environment. Examples of these are: when travelling within Ireland, the policy states that staff should make use of public transport where feasible. We also encourage staff to take public transport to Dublin Airport, e.g. those operated by Dublin Bus or Air Coach; when travelling while abroad, public transport should always be used where feasible and the use of taxis kept to a minimum; when hiring a car abroad, rentals will be standard or compact size cars. In addition to Business Travel Policy, the Travel Unit also offset a carbon tax against all trips abroad. This is calculated based on the CO2 emissions for each trip. Each quarter this amount is transferred to CRA Department to be used in the Parks Department for green initiatives. Mansion House: Lord Mayor's travel arrangements comply with Dublin City Council's Travel Policy and sustainable modes of transport are chosen where possible. The Lord Mayor's car is fitted with aerodynamics and energy management measures in order to achieve the greatest possible level of environmental compatibility. The objectives of the technologies installed in the car is to reduce fuel consumption and CO2 emission.							
	City Architects Department:	Update: City Architects have required members to share cars for travelling to conferences outside Dublin in line with Dublin City Council Travel Policy.							
	Environment & Engineering Department:	Fire Brigade Department Update: Staff Walking / using the Luas to attend Corporate Partnership Forum							
	Ballymun Regeneration Limited:	Update: To support a travel policy which promotes cycling, Ballymun Regeneration Limited purchased 4 bicycles for staff use. The bicycles are used by staff and visitors on site visits.							
	35 Sustainable travel to Conferences		Organise conferences and other such events at locations that are reachable by public transport						
	City Architects Department:	Update: Meetings or conferences organised by City Architects are located at venues in the City Centre, which are accessible by Public Transport.							
	City Manager's / Corporate Services Department:	Update: Mansion House: The Lord Mayor's travel arrangements comply with Dublin City Council's Travel Policy and sustainable modes of transport are chosen where possible.							
	Ballymun Regeneration Limited:	Update: Ballymun Regeneration Limited promotes the use of local hotels and conference facilities for meetings and events, which are accessible by Public transport.							

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Transport	36 Cycle to work for employees		Facilitate employees to cycle to work and also encourage them to do so by for example providing showers and lockers and bicycle parking and arranging contests and events
		Human Resources Department:	Update: The Cycle to Work Scheme was advertised by the Human Resources with a closing date of 23rd October 2009. 320 applications were received from Dublin City Council employees to participate in the scheme all of which have been approved. The scheme will commence in January 2010 when participants may collect their bicycles and associated equipment. Participants will pay back the costs by deductions from their salaries/wages during the course of 2010.
		Roads & Traffic Department:	Update: Proposals are being prepared to further this objective in line with the DCC Travel Plan and Mobility Management Policy. The parking and cycle to work initiatives are being undertaken by the Roads and Traffic Planning Division and our Mobility Manager. This is being implemented as part of the City Council Travel Plan and the proposals are being developed with a view to implementation in Spring/Summer 2010. The Roads and Traffic Department have applied to the Department of Transport for smarter travel project funding to improve cycling facilities and are awaiting a response. The Road Safety Unit, Roads & Traffic Department held a Bike Start Staff Cycling Training Day on Wednesday 14th October, 2009. This included theory of safe cycling, health & safety as applies to cycling for work, off-road handling and practical level 2 and level 3 on-road. The Mobility Management Unit promoted and organised staff to participate in this years Irish Heart Foundation, Smartertravel Workplaces inter-company Pedometer Challenge. 300 staff took part and a third of employees that took part were cyclists. The challenge started on 16th September, 2009 and ran for a period of four weeks until 14th October, 2009 and included cyclists by giving them equivalent added steps for their cycling time. It was well received and a success. When the cycle to work scheme has been rolled out to staff after Christmas the Mobility Management Unit is organising a cycle to work week early 2010 so that staff can cycle in to work together promoting a safer environment and thereby encouraging more staff to travel by bike.
		All City Council Departments	Update: Promotion of "Cycle to Work" scheme to encourage staff to reduce car usage.
		City Manager's / Corporate Services Department:	Update: Mansion House: 100% of staff in Mansion House use public transport, walk or bike to work. Facilities such as showers, lockers and parking are provided for staff who wish to cycle and/or walk to work. Civic Offices: There are 14 showers located in Civic Offices. A bicycle parking area is available to staff in the Civic Offices car park (-1 level).
	Ballymun Regeneration Limited:	Update: Showers and safe bicycling parking are provided at Ballymun Civic Centre to encourage cycling.	
	37 Parking		Assess the parking situation for employees and withdraw free parking to as large extent as possible
		Roads & Traffic Department:	Update: Proposals are being prepared to further this objective in line with the DCC Workplace Travel Plan and Mobility Management Policy.
	38 Bicycle & Pedestrian		Increase the number of secure cycle parking spaces across the city and in the car park or outside locations of Council offices/property
		City Architects Department:	Update: Cycle parking is always included as a brief requirement in all housing developments designed by City Architects or by consultants.
		Roads & Traffic Department:	Update: Dublin City Council are continuing to provide additional on street parking and recently have provided 200 cycle spaces at no charge within Drury Street Car Park.
	39 Bicycle & Pedestrian		In conjunction with the Director of Traffic, increase safety measures at junctions for cyclists and pedestrians
		Roads & Traffic Department:	Update: The Roads and Traffic Dept. assess the need for safety measures at junctions on a yearly basis and applications for funding are made to the DTO and to the Dept of Environment and Transport for remedial measures.
		Ballymun Regeneration Limited:	Update: Ballymun Regeneration Limited, with assistance from the cycling officer are currently carrying out a feasibility study to assess the potential for Ballymun to become a Smarter Travel Demonstration Town. The study will identify opportunities for encouraging walking and cycling and improving public transport.
	40 Bicycle & Pedestrian		Improve connectivity of the cycle lane network
		Environment & Engineering Department:	Strategic Planning and Project Management Division Update: Sutton to Sandycove (S2S) north Promenade and Cycleway Project at detailed design stage.
		Roads & Traffic Department:	Update: A three year Plan is being prepared for implementation beginning in 2010 in consultation with the City Council and the Dept of Transport
	41 Bicycle & Pedestrian		Start up the rental service Dublin City Bike
		Roads & Traffic Department:	Update: This scheme is operating in the City and is being run on behalf of the city, by JC Decaux (launched on the 13th September 2009). It provides 450 bicycles and maintains them at 40 locations across the city.

Heading in Strategy	Theme	City Council Department update:	Action to be taken by Dublin City Council & Update
Transport	42 Bicycle & Pedestrian		Influence the possibilities to bring bicycles on trains and buses
		City Architects Department:	Update: Consideration will be given to this proposal through Transport 21.
		Roads & Traffic Department:	Update: This has potential to reduce significantly the capacity of public transport vehicles and must be considered in this context.
	43 Bicycle & Pedestrian		Develop a marketing strategy to promote cycling
		Roads & Traffic Department:	Update: A Dublin City Cycling Officer was appointed on the 5th January 2009 and a strategy to promote cycling is currently being developed.
	44 Bicycle & Pedestrian		Expand pedestrianisation where possible
		Roads & Traffic Department:	Update: The expansion of pedestrianisation must be subject to concerns of safety. Full pedestrianisation requires a level of pedestrian activity that is outside the potential of most streets, however pedestrian priority and pedestrian dominated routes are being pursued.
45 Public Transportation			Continue the provision of QBCs (through the QBN office)
	Roads & Traffic Department:	Update: This is being done through the QBN and where possible through the planning process.	
	Dublin Transportation Office:	Update: The development of the network of bus priority throughout the region is likely to remain an important element of any emerging preferred strategy for the future. While no new 'corridors' as such have been implemented over the last year, access to corridors has been improved by provision of new priority schemes and the operation of existing corridors has been improved. For example, existing priority on the Malahide Road and Swords Road QBCs have been enhanced, resulting in buses having first level priority from Clare Hall and Collins Avenue respectively to the city centre. The N3 corridor has been greatly enhanced by the provision of inbound bus lane on the former hard shoulder of the road. New bus priority facilities have been provided on Blanchardstown Roads North & South (feeding the N3 corridor), Mt. Merrion Avenue (spanning the Rock Road and N11 corridors) and Kill Lane (feeding the N11 corridor), for example. The city centre continues to be a focus of attention – both in providing bus priority and improving the effectiveness of corridors which already exist. The DTO Steering Committee approved the City Centre Traffic Management Plan (2006), a key recommendation of which was the implementation of the bus priority scheme in College Green, that had the dual benefit of removing through traffic from an area of the city centre and of using the road space released to operate more reliable bus services and improve cycling and walking environments, thus improving access to the city centre and reducing environmental degradation caused by traffic.	
46 Public Transportation			Continue discussions with the bus companies of the possibility of real time information, which provides timely and accurate data such as route number, final destination, waiting time and service disruptions etc. and which can increase the use of public transport by 6%
	Roads & Traffic Department:	Update: The Roads and Traffic ITS Division are implementing elements of this currently. The ITS Division is currently ready to facilitate Dublin Bus in the provision of real time passenger information. DCC will provide the screens and transfer the information via our communications network. Dublin Bus will provide the information to be transferred to the screens (eg. whether the buses are ahead or behind time. In short DCC are now in a position to begin, subject to finance, to transfer and display the information, subject to provision of the information by Dublin Bus. DCC are also developing a system to allow buses priority at specific signal controlled junctions. It is anticipated that a pilot will be ready for testing this in the summer of 2010.	
47 Public Transportation			Investigate the possibility of introducing a uniform ticket system for all public transport, possibly also including rental fees for car sharing services and rental fees for bikes
	Dublin Transportation Office:	Update: Arising from recommendations in previous transport strategies, the Department of Transport mandated the Railway Procurement Agency (RPA) to implement an Integrated Ticketing System (ITS) in the Greater Dublin Area (GDA) initially. The current project is designed to provide a common ticketing solution based on smart cards for all transport services into and within the Greater Dublin Area. Once this is established and operating successfully in the GDA, it is anticipated that the Department of Transport may extend the scheme nationally. Good progress has been made over the last year on the GDA ITS project. For example, IBM was appointed to provide the back office support systems and software. This is being developed in Singapore and will be installed in 2 phases – Phase 1 by December 2009 and Phase 2 is planned for August 2010. The RPA is also working with ticketing equipment suppliers who supply equipment to the transport operators, including private sector bus service providers, that operate services within and into the GDA. The programme of work involves modifying their equipment so that it can fully support the proposed ITS smart card. Work is progressing well, and RPA intends to start intensive testing of their systems over the coming weeks. Successful testing will mean a measured roll out of the integrated smart tickets to end-users of transport services. The implementation scheme will grow over the next months with the intention of having most of the technical work completed during 2010. The possibility of expanding the scheme to include taxis in the Integrated Ticketing System may be included in the emerging preferred 2030 Vision for the region.	

Heading in Strategy	Theme	City Council Department update:	Action to be taken by Dublin City Council & Update
Transport	48 Renewable & Clean Fuels		Promote the use of renewable fuels within the bus fleet
		Dublin Transportation Office:	Update: This is one of the possible schemes to be included in the emerging strategy and currently Dublin Bus has a 'clean' vehicle on test.
	49 Renewable & Clean Fuels		Promote the use of renewable fuels within the Council's vehicle fleet
		Environment & Engineering Department:	Fleet Management Division Update: Dublin City Council currently runs a fleet which is almost entirely diesel, mileages are generally low and vehicles such as cars are already specified with small engines where possible. The vehicle market is currently characterised by rapid change especially in areas such as hybrid and electric vehicles and Dublin City Council continues to monitor developments in this area, before consideration can be given to adopting alternative energy efficient vehicles for our fleet.
		Environment & Engineering Department:	Drainage Division Update: Promotes the use of renewable fuels within the Drainage Services' vehicle fleet - 4 vehicles in the fleet use unleaded and bio ethanol (E85).
	50 Renewable & Clean Fuels		Promote more research into renewable fuels in DCC's fleet of vehicles
	Environment & Engineering Department:	Fleet Management Division Update: The Council currently has 29 flexi fuel vehicles refuelling on E85 bioethanol which are Ford Focus flexi fuel vehicles. These are vehicles that can run on either petrol or bio ethanol or a mixture of both. E85 Bio ethanol which is supplied by Maxol, is made up of 85% ethanol and 15% petrol. It is essentially an alcohol that is produced from plants like sugar beet, wheat and maize. The bio ethanol that Maxol supply is currently produced from whey (a derivative of milk). Unlike fossil fuels, such as petrol and diesel, it is a renewable resource.	
51 Freight Transport			Promote a shift to rail freight transport
	Dublin Transportation Office:	Update: The DTO is currently developing a policy for freight both for 2030 Vision and the EU project SMARTFREIGHT, in which DTO is a partner. A mode shift to rail transport is a measure for inclusion in the DTO 2030 Vision. Research will not be completed until next year but some preliminary conclusions have been drawn from a desk study and discussions with the industry which suggest there may be benefits from this. Further industry views on issues, including environmental impacts, will be sought in a survey of fleet managers to be undertaken by DTO in Jan 2010. Other measures that are being considered by the DTO Strategy include: <ul style="list-style-type: none"> • to reduce or manage freight mileage, include access control and permit measures, which might be based on environmental grounds, • freight road user charging, • priority freight lanes and network improvements, all to be underpinned by a proposed Quality Freight Partnership approach.	
52 Freight Transport			Investigate the possibilities of building a logistics centre (or several) where trucks leave their goods and then clean vehicles can transport them into the city on optimised routes
	Dublin Transportation Office:	Update: The DTO is currently developing a policy for freight both for 2030 Vision and the EU project SMARTFREIGHT, in which DTO is a partner. Consolidation centres are a measure for inclusion in the DTO 2030 Vision. Research will not be completed until next year but some preliminary conclusions have been drawn from a desk study and discussions with the industry, which suggest there may be benefits from this. Further industry views on issues, including environmental impacts, will be sought in a survey of fleet managers to be undertaken by DTO in Jan 2010.	

Heading in Strategy	Theme	City Council Department update:	Action to be taken by Dublin City Council & Update
Transport	53 Mobility Management		Promote the use of Mobility Management Plans, including Workplace Travel Plans, within the public and private sectors and for the Council's own staff
		Human Resources Department:	Update: The Human Resources Department has administered a "Travel Pass Scheme" for a number of years. This scheme enables staff to purchase yearly bus or train tickets and avail of a tax reduction. The cost of the tickets are deducted on a weekly or fortnightly basis from staff who participate. The scheme encourages greater use of public transport rather than reliance on personal motor vehicles.
		Roads & Traffic Department:	Update: The Roads and Traffic Department have formed a Mobility Management Unit and have began discussions with recipients of planning permissions with mobility management conditions. The unit is also implementing elements of the City Workplace Travel Plan
		Ballymun Regeneration Limited:	Update: Mobility Management will be promoted through the Action At Work / Green Team Campaign. Additionally Global Action Plan, on behalf of Ballymun Regeneration Limited, run an effective local awareness campaign each year during mobility week. In addition, the development of Mobility Management Plans is also included in the current Smarter Travel Programme Funding Application being prepared by BRL.
	54 Mobility Management		Promote the use of video conferences
		Information Systems Department:	Update: IS department have facilitated 3 webinars for DCC staff earlier this year, including the running of a "Strategic Sustainable development course" which was based in Sweden and Canada. We are currently in the process of accessing Bandwidth requirements to make this facility available for staff located outside the Civic Office campus. e.g. Fire Brigade stations. We are currently in the early stages of implementing a bandwidth upgrade to all external sites (as a result of a tender earlier this year). In assessing what bandwidth is required for each site the requirement for webinars will be taken into consideration. Webinars are very internet intensive and require high levels of network throughput, which can place a huge demand on available internet connections. The IS Dept has previously conducted a series of Web Seminars for the Strategic Sustainable Development Project. For Dublin City Council, the use of Webinars will certainly increase as the need for external contact (both business and educational) increases and the inevitable economic restrictions placed upon the Council take effect. With the opening of the newly computerised corporate training rooms (Block 3, Floor 1), Dublin City Council are now in a position to hold larger and more regular webinars.
		City Manager's / Corporate Services Department:	Update: 3 Palace Street: Video conferencing facility installed to cut down on the need for business travel.
		Ballymun Regeneration Limited:	Update: Video conference facilities exist in the Ballymun Council Chambers.
	55 Mobility Management		Implement school travel plans, in cooperation with An Taisce's Green Schools programme
		Roads & Traffic Department:	Update: Roads and Traffic, Road Safety unit and the City Cycling Officer are both involved in these areas. BIKE START was launched in September 2009 and comprises of four levels of cycling training that will provide safety awareness and practical cycling skills to senior primary school children. Staff from the Roads Safety Unit will deliver the programme to primary schools throughout Dublin. A specific adult safe cycling programme will also be offered to those returning to cycling. Dublin City Council completed a pilot 'Healthy Walking and Cycling Project' aimed at primary school parents and their children in 2008, the project responded to health and safety concerns from parents and children in the area of Scoil Fiachra Primary School Complex, Beaumont. Following consultation between Dublin City Council, parents and teachers a new 'Road Safety Healthy Travel Charter' was piloted by Dublin City Council and the Parents Association. The main aims of the Travel Charter was to promote sustainable transport, reduce school related car journeys, enable schools to develop their own solutions and to reduce the number of accidents. Following consultation it was agreed that a Park-n-Stride project would be set up to promote a healthy strategy through fitness and daily exercise. In conjunction with this scheme, Dublin City Council created a parking set down area for parents to allow their children to walk-n-stride to school. An additional school warden was provided to allow pupils cross safely adjacent to the parking area.
		Ballymun Regeneration Limited:	Update: Global Action Plan works in schools promoting cycling and pedestrian buses in Ballymun as part of their Schools Programme, which assists schools to get their green flag. BRL fund Global Action Plan Ballymun to facilitate this work, the activities of which are developed in collaboration with the BRL Environmental Team.
	56 Car Restriction		Investigate the possibilities of further restricting car traffic in the city centre and giving higher priority to pedestrians at traffic lights
		Roads & Traffic Department:	Update: Private car access to the city centre is an economic necessity, however Roads and Traffic Policy of restricting through traffic is being actively implemented, eg. College Green Bus Corridor.

Heading in Strategy	Theme	City Council Department update:	Action to be taken by Dublin City Council & Update
Waste Management	57 Green Procurement guidelines		Under its new green procurement guidelines, make demands regarding packaging and other waste related issues when procuring supplies etc.
		City Architects Department:	Update: 1) When overall procurement contracts permit, City Architects chooses recycled materials. 2) New large drawing printer to be acquired by City Architects will be certified as highly energy efficient and will not produce any waste toner (it is reused by the machine itself.)
		Environment & Engineering Department:	Waste Management Division Update: The Dublin City Council Procurement section have issued guidelines which are being provided to staff when they are drafting tenders. It is the intention going forward for selected provisions in the guidelines to be inserted directly into the standard terms and conditions of tenders. This is in line with ongoing National and European trends.
		Ballymun Regeneration Limited:	Update: Green procurement guidelines adhered to in Ballymun Regeneration Limited works contracts. For stationary and office supplies BRL are required to order from DCC supplier. In relation to works, under the EER all new developments in Ballymun are required to meet a range of minimum requirements in relation to green procurement of building materials.
	58 Prevention		Continue to expand the resources for awareness and educational staff and campaigns specifically targeted at waste prevention at the household, school and business level
		Environment & Engineering Department:	Waste Management Division Update: <u>Schools:</u> A total of 226 Dublin City schools are currently registered with An Taisce and are working on various stages of the green-schools programme. The majority of the schools are primary - 147 schools, and secondary, 55 schools. There are also 6 third level institutions, 13 Special schools and 5 pre-schools working on the programme. <u>Businesses:</u> The Green Business function has been involved with prevention awareness raising across a broad range of enterprises. At the large scale with companies such as Eircom, Ulster Bank and Google. At the SME scale with organisations such as TASCQ and Dublin Chambers of Commerce. And at the micro/entrepreneurial scale, with start-up such as the Hub (enterprise spaces for environmental entrepreneurs). <u>Household / Community:</u> Currently developing Energy Smart & Green Homes Programme for Communities. The City Council adopted a 3 year Litter Management Plan in May 2008. The Council are implementing objectives in the Plan under 5 key headings, Litter Prevention, Litter Management & Cleaning, Graffiti and Enforcement. The first year review of the implementation of the Plan is currently underway.
		Ballymun Regeneration Limited:	Update: Ballymun Regeneration Limited & Dublin City Council are currently in the process of developing the country's first integrated waste recycling, recovery, education and research centre. The aim of the project is to promote effective use and management of resources to all sectors. The centre has established a number of award-winning pilot resource recovery projects and is an accredited Discover Primary Science Centre.
	59 Reuse		Continue to promote and extend the FREE trade web service
		Environment & Engineering Department:	Waste Management Division Update: The FREE Trade Service continues to expand and now has over 30,400 members, as of Sept 2009. In total over 22,800 items have been reused since the launch of the site in August 2006. The plan to extend the site to a National Platform is at an advanced stage and should be rolled out in early 2010.
		Ballymun Regeneration Limited:	Update: FREE trade is promoted by BRL and the Rediscovery Centre Furniture Recycling and Community RePaint projects, on promotional literature and the website www.rediscoverycentre.ie
	60 Reuse		Maintain the support of existing community reuse schemes through educational and financial support and support the development of new initiatives
		Environment & Engineering Department:	Drainage Division Update: The use of Biofert for fertilizer on a commercial basis.
		Environment & Engineering Department:	Waste Management Division Update: Busybees is a continuation of the innovative Sunflower Recycling project - Busybees prepare and resell furniture - a portion of this furniture being made available as a result of Dublin City Council's Bulky household service. During the bulky household collection of 2008, 36 tonnes of material was made available to Busybees for resale in their furniture shops. From March to August 2009, 23 tonnes of material was provided (figures for Sept. & Oct. are as yet not available).
		City Manager's / Corporate Services Department:	Update: Secretariat / City Hall & Civic Offices: A collection of unused PCs and associated equipment was arranged from the Civic Offices by Camara (a registered Irish Charity located in the Digital Hub and staffed primarily by volunteers). Franchise Section, Ormond Building: FMW Recycling are used to dispose of all obsolete electrical and PC equipment.
		Ballymun Regeneration Limited:	Update: Ballymun Regeneration Limited supports the development of Rediscovery Centre and Global Action Plan reuse and recovery programmes such as Rediscover Fashion and community composting.

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Waste Management	61 Materials Recycling		Meet the 59% recycling target by 2013 and make Dublin a leading recycling region in Europe
		Environment & Engineering Department:	Waste Management Division Update: The municipal waste recycling rate is the headline indicator for municipal waste and a target of 45% by 2010 was set in the Regional waste plan 2005 - 2010. A municipal waste recycling rate of 41% was reached in 2007 and represents a 1% increase on the 2006 figure. Municipal waste is a combination of Household waste, commercial/industrial waste & litter & street sweeping. Packaging waste arisings are calculated from the quantity of packaging waste landfilled within the region plus the quantity of packaging waste recovered – for 2007, this equated to 288,081 tonnes. The commercial sector continues to perform well with high levels of segregation of dry recyclable and packaging waste types driving recovery in this sector. The household recovery rate continues to progress with the roll out of the brown bin. The Household waste recycling rate is a secondary indicator for municipal waste and has increased to 28% in 2007.
		All City Council Departments	Update: In the Summer of 2007, the Green Business Officer in conjunction with the Facilities Management Division implemented the recycling programme in Civic Offices (Action at Work) which involved introducing separate bins for 1) dry recyclables, 2) food waste (organic material) and 3) general refuse. Since then, all paper, cardboard and plastics (bottles etc.) are recycled. Most internal communications are conducted via email and printers are set to default double-sided printing. Where possible, all paper/stationery is bought from recycled materials in line with the Green Procurement Policy. Out-of-date stationery is recycled and used in-house as rough work and also given to Dublin City Council Creche. All refill cartridges are donated to charity. Batteries are recycled. Old Mobile Phones are donated to charity. Cleaning products have been diluted, as appropriate, to reduce costs and do less harm to the Environment.
		City Manager's / Corporate Services Department:	Update: Secretariat / City Hall, Franchise Section, Mansion House and Civic Offices: Action at Work is adhered to within the offices and placed on the monthly agenda of Team Talk meetings. This office is aiming to introduce a "paperless office" in respect of the circulation of City Council documentation to the 52 City Councillors in addition to TD's, Senators and officials (where permitted by legislation). A Meetings Management Site has been set up on Dubnet site by Kanos (I.T. Solutions Company), in conjunction with the I.S. Department, to facilitate the loading of Council reports to be viewed by Staff/Councillors and submission of questions/motions from Councillors. A Waste Audit was conducted in April 2008 and Recycling bins are available to staff in the canteen to recycle mobile phones, batteries, printer cartridges, cd's, floppy disks and videotapes. Facilities Management employs a range of best practices to ensure that our staff restaurant is in compliance with Dublin City Council's approved FOGs programme.
		Environment & Engineering Department:	Drainage Division Update: This section now composts screenings and gully waste (Types of large solids removed from sewers and road gullies. Can range from small organic material to grease and large rags.
	62 Materials Recycling		Monitor the development of new internal markets for recyclables and actively consider the use of recyclable products in line with the new green procurement guidelines
		City Architects Department:	Update: Recyclable and recycled products are considered when specifying for all building projects.
		Environment & Engineering Department:	Waste Management Division Update: The Implementation Team or Market Development Group (MDG) which is tasked with project managing this 5 years Programme was appointed in October 2008. The MDG is a cross-sectoral group with representatives from a range of major stakeholder organisations. These include IBEC, Enterprise Ireland, National Standards Authority of Ireland, Irish Small and Medium Enterprise, Department of Enterprise, Trade and Employment, Clean Technology Centre, Environmental Protection Agency, the City and County Managers Association, Irish Waste Management Association, Small Firms Association, the DOEHLG etc. A Business Plan for 2009 was published and is available for download at www.mdg.ie The Programme website was officially launched in May 2009 by Minister J. Gormley. The website provides an access to a number of resources (e.g. directory of recycled products, Directory of reprocessors). Two tenders are currently advertised for: • Compost demonstration trials on combinable commercial crops • Irish Recycled Plastic Waste Arising Study A number of other initiatives are also underway such the establishments of working groups on paper and plastic - Best Practice in waste plastic collection and reprocessing . The Market Development Group also participate to the DoEHLG Action Group on Recyclables which was set up following the collapse of recyclables prices.
		Ballymun Regeneration Limited:	Update: The Rediscovery Centre works with private businesses and third level institutions in identifying markets for recycled waste streams. Projects such as the NCAD & BRL recycled playground initiative demonstrate best practice and support enterprise development.
	63 Materials Recycling		Implement the Commercial Waste Bye-Laws to ensure that business and industry source-separate specific recyclable and organic waste generated on-site
		Environment & Engineering Department:	Waste Management Division Update: These guidelines are currently being reviewed by the waste industry.

Heading in Strategy	Theme	City Council Department update:	Action to be taken by Dublin City Council & Update
Waste Management	64 Biological Treatment		Progress the delivery of the centralised treatment facilities for Dublin as swiftly as possible
		Environment & Engineering Department:	Waste Management Division Update: Dublin City Council have contracted the processing of organic waste to a third party contractor, due to the current economic climate. Tendered prices for provision of this service are currently very competitive.
	65 Biological Treatment		Implement a phased rollout of the brown bin across the city with all households to be included by the end of 2009
		Environment & Engineering Department:	Waste Management Division Update: Approximately 110,000 householders across the City have received a 140L Brown Bin for the separate collection of organic waste (food waste and light garden waste). For all intensive purposes the current roll-out is complete. Approximately 10,000 customers have yet to receive a brown bin due to inaccessibility or mix collection routes (combination of bag & bins on same route) they will be dealt with on a case by case basis. All householders are notified in advance and an information pamphlet outlining what waste materials can be placed in the bin and a schedule of collections for 4 weeks is also provided. From Jan - July '09, over 9000 tonnes of organic waste material has been collected through the brown bin scheme.
	66 Energy Recovery		Continue to develop the district-heating project for the city
		Environment & Engineering Department:	Strategic Planning and Project Management Division Update: Fit out of Liffey Services tunnel to include district heating pipes
	Environment & Engineering Department:	Waste Management Division Update: The procurement process has commenced for the design and installation of a District Network System linking the proposed Waste To Energy Facility with new developments in the North Docklands Area.	
	Ballymun Regeneration Limited:	Update: The Ballymun Regeneration Limited Energy and Environmental Review includes as a minimum requirement that all new developments (residential and commercial) must allow for future accommodation of district heating through allocation of sufficient space for pipework and connection to heat exchangers.	
67 Landfill			Ensure that landfill gas capture rates of 70-75% are achieved at the existing and proposed landfill facilities to minimize the emissions
	Environment & Engineering Department:	Waste Management Division Update: For the past 8 years, landfill capture rates of 85-90% have been achieved at the landfill at Arthurstown (all refuse, domestic and commercial waste from the City is sent to Arthurstown Landfill). This equates to a rate of 9500 cubic meters of methane gas per hour which is converted to electricity by the on-site utilisation plant. This utilisation plant generates 12 mega watts of electricity an hour.	
68 Waste Transportation			Optimise the routes travelled by the waste collection vehicles
	Environment & Engineering Department:	Waste Management Division Update: The biggest change in waste transportation has been the reduction in the numbers of refuse collection vehicles. This was achieved by designing each daily route for 1350 customers (up from 1000 customers). The optimisation of these routes has meant that 29 trucks are now doing the work that 37 trucks were doing. This is a saving of 8 trucks per week. Fleet Management Services are also investigating the possibility of reducing any unnecessary weights from the vehicles. This will result in less fuel being used during travel time. On the refuse collection vehicles, there are three trucks on pilot schemes using biofuel. There are 17 bio ethanol Ford Focuses out of a fleet of 38. In addition new sweeping machines, Johnson 650s have new euro5 engines which have very low emissions.	

Heading in Strategy	Theme	City Council Department update:	Action to be taken by Dublin City Council & Update
Biodiversity	69 Impact indicator of climate change	Culture, Recreation & Amenity Department:	Track changes in phenology in the National Botanic Gardens, Glasnevin and link data with meteorological data and make the results available within DCC. In an Irish context, phenology is the most effective impact indicator of climate change, for example the length of the growing season of Lime tree
		Ballymun Regeneration Limited:	Parks & Landscape Services Division Update: Being carried out by National Botanic Gardens
			Update: Ballymun Regeneration Limited through it's Discover Primary Science initiative participate in the green wave programme which tracks natural indicators of climate change. This is done through educational workshops delivered to primary school children in Ballymun Civic Centre. In addition as part of the Biodiversity Action Plan for Ballymun, a range of key indicator data is being collected annually including bird species, insect species, flora in swales and other Biodiversity areas. These indicators are also suitable for use as phenology indicators if combined with seasonal climate variation data.
	70 Track changes as indicator		Initiate a project to survey present distributions of indicator butterfly/moth species and track changes in distribution over time. Butterflies and moths are some of the most important indicators of climate change. Butterflies like the Marsh Fritillary are under threat due to land use changes such as the draining of wetlands and the demise of peat lands. Others such as the Holly Blue are increasing in numbers and have spread further north while many of our commoner butterfly species are flying earlier than before
		Culture, Recreation & Amenity Department:	Parks & Landscape Services Division Update: Some initial surveys carried out in 2009. No resources to continue.
	71 Track changes as indicator		Link with third level institutions to assess distribution and abundance of intertidal faunal species e.g. barnacles, limpets and topshells and common seaweeds and track changes in distribution over time. Temperature changes could alter the abundances in Europe of northern and southern intertidal species and possibly alter their geographic ranges and distribution
		Culture, Recreation & Amenity Department:	Parks & Landscape Services Division Update: This a matter for the Department of Marine and Natural Resources primarily. DCC has no resources to fund this research presently.
	72 Mitigate the effects of Climate change		Ensure continued stringent protection of Natura 2000 sites currently 3649 hectares, which, together with connectivity between them are essential to mitigate against the effects of climate change
		Culture, Recreation & Amenity Department:	Parks & Landscape Services Division Update: This is part of our core function in Parks and Landscape Services Division. The Appropriate Assessment of the Draft City Development Plan has been completed by this Division and the Planning Department in 2009 to ensure that policies of the Plan maintain the integrity of these sites with regard to climate change effects.

Heading in Strategy	Theme	City Council Department update:	Action to be taken by Dublin City Council & Update
Biodiversity	73 Mitigate the effects of Climate change		Create a network of corridors linking Natura 2000 sites to each other, to green areas and to Dublin City conservation areas. Corridors must be appropriate, for example native Irish hedgerows/tree corridor, canal/river, wetland area, and parks. A cohesive network will allow the most resilient habitats and species to migrate and therefore it would provide the source for shifting ranges of habitats and species
		Culture, Recreation & Amenity Department:	Parks & Landscape Services Division Update: This is and has been a core activity for decades and will be reflected in the Draft City Development Plan, continuing measures undertaken in the current Plan such as management planning for the main river corridors (Liffey, Dodder and Tolka). Work progressing on Mayne River Linear Park. Plans completed for Cardiffsbridge Park on River Tolka.
	74 Mitigate the effects of Climate change		Open up culverted streams and rivers. This is a mechanism of creating a corridor for species to move and adapt with changing climate. It is also providing much needed waterbody habitats for many species
		Environment & Engineering Department:	Strategic Planning and Project Management Division Update: Long term vision. The intention is as part of the City Centre Sewerage Scheme to examine Grangegorman Scheme first (finance dependant).
		Culture, Recreation & Amenity Department:	Parks & Landscape Services Division Update: Sites are being identified, surveyed and planned in conjunction with Drainage Division in 2008 and 2009 and will be recovered subject to resources being provided.
	75 Coastal Defence		Use soft engineering options where possible. Soft engineering methods that can be employed to reinforce coastal defences. These allow for natural and continued accretion of three Natura 2000 sand dune habitats that occur in Dublin. It also allows the coastline to continue augmenting its natural defences against rising sea levels
		Culture, Recreation & Amenity Department:	Parks & Landscape Services Division Update: Continued management by this Division of North Bull Island ecosystem.
		Environment & Engineering Department:	Strategic Planning and Project Management Division Update: Sutton 2 Sandycove (S2S) North at Design Stage and S2S South nearing completion.
	76 Coastal Defence		Provide coastal defences to protect the community and reduce risk of flooding.
		Environment & Engineering Department:	Strategic Planning and Project Management Division Update: Dublin City Council hosted an international conference on the SAFER Project in April 2008, which looked at all aspects of managing the risk of flooding. Interreg IIIB SAFER Project (2003/08) - SAFER (Strategies and Actions for Flood Emergency Risk Management) promoted Integrated flood risk management based on: Spatial Planning, Infrastructural Defences and Flood Emergency Response (FHI - Flood Hazard & Risk Information, FPS - Flood Partnerships, FEM - Flood Emergency Management). The Dublin work was focused on the Coastal Flooding Threat. Tidal Surge Early Warning System in place, Merrion Gates Scheme completed, Spencer Dock Tide Gates completed, Flood Risk Mapping completed, Clontarf Flood Scheme (to Wooden Bridge) - to construction, Sandymount Scheme - feasibility as part of S2S Scheme, Clontarf Flood Scheme (North of Wooden Bridge) - part of S2S North at Detailed Design, Rising Sea Level Risk - Project 2030/2050 Pre Feasibility Report completed, Emergency Management Plans in Place. Opening in May 09 of Spencer Dock Flood Gates to protect East Wall Area.
		Culture, Recreation & Amenity Department:	Parks & Landscape Services Division Update: This Division supports the implementation of Flood Risk Assessment Plans.
	77 Coastal Defence		Ensure that any reclamation of estuary land will be carried out in a sustainable manner.
		Culture, Recreation & Amenity Department:	Parks & Landscape Services Division Update: Should any planning applications arise with regard to land reclamation, this Division will provide expertise and advice to Planning Department to ensure estuarine biodiversity is protected.
	78 Coastal Defence		Ensure that there will be no removal of sand from beaches. Measures to protect and rehabilitate dune systems will be implemented
		Culture, Recreation & Amenity Department:	Parks & Landscape Services Division Update: This Division ensures that sand dunes are protected and rehabilitation of sand dunes, especially at North Bull Island, is undertaken presently. Further planning for dune management is undertaken at a number of sites as part of park management plans.

Heading in Strategy	Theme	City Council Department update:	Action to be taken by Dublin City Council & Update
Biodiversity	79 Coastal Defence		Ensure that all coastal defence measures are assessed for environmental impacts
		Environment & Engineering Department:	Strategic Planning and Project Management Division Update: All schemes go through E.I.S. as appropriate.
		Culture, Recreation & Amenity Department:	Parks & Landscape Services Division Update: Under European directives on EIA and the Habitats Directive, this Division ensures that proper assessment is carried out and reviews such assessments.
	80 Planning		Conduct an evaluation of the impacts and threats of climate change on ongoing planning and development projects both from the mitigation and adaptation perspectives
		Environment & Engineering Department:	Strategic Planning and Project Management Division Update: Through a number of key policies set out in the infrastructure chapter of the Development Plan which deal with flood risk management, development control policies in relation to individual development proposals regarding flood reduction and mitigation measures. The requirements of Sustainable Urban Drainage Systems for all new developments: Projects 2030/2050 Barrages to protect Sea Level, Flood Resilient Cities - Pluvial Flooding, Extreme Events - National Framework for Major Event Management, Water Services Strategic Plan, New Major Water Source required, OPW Guidance on Flood Risk Assessment, OPW CFRAM Studies - (Impact EU flood defence)
		City Architects Department:	Update: Mitigation and adaptation are always taken into consideration in designs. For example, we design against flooding risk, to reduce rainwater runoff, to reduce carbon emissions and to reduce water use.
		Culture, Recreation & Amenity Department:	Parks & Landscape Services Division Update: This is being carried out as part of planning policy in the new Draft City Development Plan.
		Ballymun Regeneration Limited:	Update: The Ballymun Masterplan for surface water attenuation implemented. Environmental Appraisal of the overall Ballymun Masterplan carried out. Environmental Impact Statement (EIS) carried out for all Ballymun Regeneration Limited housing developments and demolitions. Strategic Environmental Assessment (SEA) carried out for North Ballymun Local Area Plan (LAP) in Fingal County Council.
	81 Planning		Maintain valuable mitigation habitats such as wetlands and forested areas
		Culture, Recreation & Amenity Department:	Parks & Landscape Services Division Update: Habitat management plans have been completed for much of the wetlands and woodlands under the control of this Division. While there are no forested areas in Dublin City, we will continue to manage and promote urban woodlands, in liaison with the OPW. We have completed an Invasive Species Survey (2009) of the City's watercourses and are implementing controls to maintain biodiversity of riverine habitats.
		Ballymun Regeneration Limited:	Update: The Ballymun Biodiversity Action Plan highlights areas of value within the area which are currently being protected or enhanced.
	82 Planning		Identify opportunities for new habitats, buffer zones and wildlife corridors
		Culture, Recreation & Amenity Department:	Parks & Landscape Services Division Update: Potential for new or enhanced habitats in private/institutional lands are being identified to advise Planning Department, as part of the Development Plan process to prepare a strategy for green infrastructure.
		Ballymun Regeneration Limited:	Update: The Ballymun Masterplan and the Biodiversity Action Plan make provision for the creation of new habitats, buffer zones and wildlife corridors. Coultrey Park and Balcurris Park provide excellent examples of integrated habitat development.
	83 Planning		Ensure minimal and appropriately assessed development along riverine zones, including buffer zones
		Culture, Recreation & Amenity Department:	Parks & Landscape Services Division Update: The Parks and Landscape Services Division takes an active role in advising the Planning Department at both strategic level, in terms of green infrastructure in the Draft City Development Plan, and on an on-going site basis for individual planning applications and projects.

Heading in Strategy	Theme	City Council Department update:	Action to be taken by Dublin City Council & Update
Biodiversity	84 Wetland provision		Provide of new wetlands throughout the city. With increased temperatures there will be higher rates of evapotranspiration, which will cause drying of wetland areas. Artificial wetlands will be needed to act as attenuation ponds and also to provide habitat to fish, amphibian, invertebrate species which in turn are needed as food for higher animals such as birds, bats, otters etc.
		Environment & Engineering Department:	Drainage Division Update: The Drainage Division have built one artificial wetland in Finglas and is engaged in the design of five other wetlands around the City.
		Culture, Recreation & Amenity Department:	Parks & Landscape Services Division Update: This Division has undertaken several projects for wetland creation, including Fr. Collins Park, and is planning additional sites which will be completed, subject to future resources. We liaise with BRL with regard to new wetlands we will manage at Poppintree Park and with Drainage Department to identify future sites for attenuation needs.
		Ballymun Regeneration Limited:	Update: A significant wetland has been designed for Poppintree Park to allow for water attenuation, habitat creation and recreation.
	85 Wetland provision		Provide Integrated Constructed Wetlands with appropriate planting
		Culture, Recreation & Amenity Department:	Parks & Landscape Services Division Update: This work is on-going, subject to available lands within public ownership and resources to construct them. New wetlands have been provided in Fr. Collins Park.
		Ballymun Regeneration Limited:	Update: Ballymun Regeneration Limited supports the development of integrated constructed wetlands where appropriate. The lake and attenuation area of Poppintree Park is an integrated Constructed Wetland developed by BRL, the swales in both Coultury and Balcurris Parks are constructed wetlands with high biodiversity value and the M50 lands development plan also contains provision for future construction of integrated constructed wetlands.
	86 Wetland provision		Use semi-permeable paving where possible to allow for seepage and to create habitat for micro organisms
		Environment & Engineering Department:	Strategic Planning and Project Management Division Update: Sustainable Drainage Systems (SUDS) policy in place derived from Greater Dublin Strategic Drainage Study (GDSDS).
		City Architects Department:	Update: Sustainable Drainage Systems (SUDS) is a requirement in all new building projects. Permeable paving is always considered amongst other options.
		Culture, Recreation & Amenity Department:	Parks & landscape Services Division Update: We have specified such paving and will advise other Departments on the benefits of its usage. We promote the use of permeable paving with regard to urban tree establishment, where possible. We advise Planning Department on the reduction of impermeable areas generally in site plans for planning applications and as part of the green infrastructure strategy for the Draft City Development Plan.
		Ballymun Regeneration Limited:	Update: The use of semi-permeable paving is supported by Ballymun Regeneration Limited. The Ballymun Regeneration Limited Energy and Environmental Review includes, as a minimum requirement, implementation of the SUDS Hierarchy, which is a hierarchy of sustainable urban drainage systems (SUDS). The most sustainable systems contain flood reduction, pollution reduction and landscape and wildlife benefit, such as green roofs and retention ponds. In addition, BRL have proposed the use of semi-permeable paving in a number of developments such as the Rediscovery Centre and the Emerald housing project.
	87 Invasive species		Create a policy to eradicate invasive species
		Culture, Recreation & Amenity Department:	Parks & Landscape Services Division Update: To further our on-going management commitment in this regard, we have completed an Invasive Species Survey (2009) of the City's watercourses and are implementing controls to maintain biodiversity of riverine habitats. This includes staff training, site survey and removal methods. We have introduced new measures to ensure minimisation of chemical usage and compliance with the forthcoming Pesticides Directive when controlling invasives, particularly in watercourses and wetlands. Some initial surveys have been undertaken of invasive species in 2009.
	88 Invasive species		Survey distribution of grey and red squirrel populations and formulate a management plan for the conservation of the red squirrel
		Culture, Recreation & Amenity Department:	Parks & Landscape Services Division Update: This has been completed for St. Anne's Park, the main habitat for red squirrels currently which we manage. We will continue to liaise with other bodies, including the OPW and third-level institutions, on current management methods for conservation of red squirrel habitats in the City. Red/Grey Squirrel project for St. Anne's has been completed earlier this year