

APPENDIX 6

Priority: Environment
Sub-Priority: Carbon Control and Reduction
Impact: Reducing our carbon impact on the natural environment

What we said we would do in 2014/15: -

1. Market and promote carbon reduction measures within the Council, with our partners and with the public to manage and reduce emission levels.

Progress Status	Progress RAG	G	Outcome RAG	G
<p>We drafted a delivery plan with input from the North Wales Energy Advice Centre and Carbon Trust that identified the potential for over £500k in annual savings across schools, and rolled out a schools-specific e-learning training module on energy efficiency through the Moodle system. We trained 11 schools in the use of a real-time electricity monitoring system which, pending final IT fixes, will be used in Q3 and Q4 to run a mini-competition to see which school can reduce electricity use by the greatest percentage.</p> <p>We continue to work with partners through the Local Service Board Carbon Reduction and Adaptation Group to share learning and work together on carbon reduction and climate change adaptation projects. These targets are reported against the Single Integrated Plan Priority 4. We are also working with other local authority and housing association partners through CAN Cymru Housing and other partnerships to maximise the levels of funding for energy efficiency coming into the region.</p>				

2. Challenge the Council's carbon emissions, through our assets, vehicles and people behaviour: -

- Investing in renewable energy schemes
- Investing in a more efficient fleet (vehicles)
- Improving the efficiency of our street lighting; and
- Increasing recycling of the Council's own waste

Progress Status	Progress RAG	G	Outcome RAG	G
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Achievement will be measured through:

- Carbon reduction commitment
- Renewable energy and energy retrofit schemes
- Monitoring the fuel consumption of our fleet
- Carbon emissions from Council street lighting
- Recycling performance

Carbon Reduction Commitment

Flintshire County Councils Carbon Reduction Commitment (CRC) returns showed a modest reduction of 127 tonnes from 19715 tonnes in the year 2012/13 to 19588 in 2013/14, however the 13/14 return was notably affected by a change in the CRC rules which now excludes the carbon offset from generation at our land fill sites, and secondly the energy use at Euticles which could not have been foreseen. Collectively these two issues added approximately 1000 Tonnes to our return.

Energy consumption figures for Q2 compared with Q2 last year, reflect the mild spring and warm summer showing reductions in all fuels as follows:

Electricity (-10%), Gas (-32%), Oil (-64%), LPG (-68%)

Please be advised that the oil and LPG figures may not be wholly accurate due to the seasonal nature of procuring these fuels.

Renewable Energy & Retrofit schemes

The two larger scale solar Photo Voltaic (P.V.) installations at Flint High School and Abermorddu C.P. have been tendered and an installer appointed. Installation work is expected to commence in the next month and should be complete before the calendar year end.

Two other P.V. installs have also been completed at Ysgol Brynford and the new school "Ty Ffynnon" in Shotton.

The combined installed generation rating of the four installations is just 87Kwp.

Lighting refurbishments have been completed at Connah's Quay High School and is ongoing at Trelawnyd C.P. Further lighting works are programmed at St Mary's R.C., Flint, Northop Hall C.P. and Ysgol Y Foel, Cilcain, and should similarly be completed before the calendar year end.

Fleet

All fleet vehicles will be monitored through the Tracking of vehicles to promote better utilisation of the vehicle and limits wasted journeys to further improve the CO2 performance. A new tracking protocol/policy is planned to be submitted for consideration in October 2014.

The adopted fleet review business cases on vehicle procurement and utilisation are now shaping how vehicles across the authority are being specified, procured, and utilised.

During Q1, 44 vehicles have been replaced with newer hire vehicles. These have replaced 5+ year old vehicles, and the table below shows the improved emissions (although not CO emission) of the newer vehicles. This roll-out will continue throughout this year, with the replacement figure already rising to 70 vehicles by end of July 2014.

EU emissions standards for passenger cars (in g/km)

Euro Standard	Implementation date*	CO (g/km)	THC (g/km)	NMHC (g/km)	NOx (g/km)	HC=NOx (g/km)	PM (g/km)
Diesel							
Euro I	July 1993	2.72	-	-	-	0.97	0.14
Euro II	January 1997	1.00	-	-	-	0.70	0.08
Euro III	January 2001	0.64	-	-	0.50	0.56	0.05
Euro IV	January 2006	0.50	-	-	0.25	0.30	0.025
Euro V	September 2010	0.500	-	-	0.180	0.230	0.005

Whilst considering alternative fuel options, and pool car availability, all new vehicle requests are challenged by fleet services.

Exploratory discussions have taken place with a number of vehicle manufacturers regarding electric and hybrid vehicle technologies, but as of yet these are not providing suitable alternative solutions to our commercial fleet.

Following the challenge to vehicle utilisation and replacement numbers, Fuel Monitoring will be set by using 2014/15 usage as a baseline for total

number of litres used. This is being captured through a 'Data Warehouse' that will track all vehicle transactional costs throughout the year.' Current consumption levels 14,819.88 litres of unleaded and 612,391.37 litres of diesel.

Lighting

The replacement of old technologies to new lanterns and technologies with high performance optics, electronic control gear etc. This will enable a reduction in energy and carbon consumption.

To routinely replace older conventional control gear with modern electronic gear and white light. This enables the individual to be dimmed whilst providing a large energy saving per unit

Dimming equipment is being installed during routine maintenance allowing an alternative to switching off or partial switching off in areas of potential conflict.

Recycling

The overall recycling performance has improved by 1.5% during the same period last year. We have seen a reduction of waste sent to landfill of 480 tonnes.

Achievement Measures	Lead Officer	2013/14 Baseline Data	2014/15 Target	2016/17 Aspirational Target	Current Outturn	Performance RAG	Outcome Performance Predictive RAG
EEFLM1 - Carbon Reduction Commitment - Reduce our carbon footprint through delivery of our Carbon Reduction Strategy (non domestic portfolio)	Chief Officer – Planning & Environment	1.51% (increase in year) 18.53% (cumulative reduction)	21% cumulative reduction	60% cumulative reduction by 2021	Annual return	N/A	N/A
Investment in renewable energy schemes		£300k	£100k	TBC subject to budget setting	100k	G	G
Monitoring the fuel consumption of our fleet (litres)	Chief Officer – Transport & Streetscene	N/A New Measure	Baseline Year	TBC once baseline established	14,819.88 litres of unleaded 612,391.37 litres of diesel	N/A	N/A
Reduction in carbon emissions from Council street lighting through installing improved and energy efficient street lighting, signs and bollards.		1.8%	1.75% per annum	2.5% per annum	1.5%	A	G
WMT/009b - The percentage of municipal waste collected by local authorities and prepared for reuse and/or recycled, including source segregated bio wastes that are composted or treated biologically in another way.		55.07%	57%	58%	58.5%	G	G

Risks to be managed - Ensuring that recycling and energy efficiency programmes are supported by the public and employees

Gross Score (as if there are no measures in place to control the risk)			Current Actions / Arrangements in place to control the risk	Net Score (as it is now)			Future Actions and / or Arrangement to control the risk	Manager Responsible	Risk Trend	Target Score (when all actions are completed / satisfactory arrangements in place)			
Likelihood	Impact	Gross Score		Likelihood	Impact	Gross Score				Likelihood	Impact	Gross Score	Target Date
(L)	(I)	(LxI)		(L)	(I)	(LxI)				(L)	(I)	(LxI)	
H	H	R	<p>R1. Promote and raise awareness of the benefits of recycling with the public</p> <p>R2. Increase the level, efficiency and ease of collection systems for the public</p> <p>F2. Currently working through a programme of fitting Tracker Systems to all Fleet vehicles across the authority.</p> <p>F3. Drivers Handbook Extract on Economic</p>	L	M	G	<p>R1. Key action campaigns to improve quality and quantity of materials through collections.</p> <p>Increased awareness workshops in schools. Target Trade premises not currently recycling.</p> <p>R.2 specific material campaigns to target materials with low capture rates and improve the quality of the materials.</p> <p>F2 Tracking of vehicles</p>	<p>Chief Officer Environment and Planning</p> <p>Chief Officer Streetscene and Transportation</p>	↔	L	L	G	2018/19

Gross Score (as if there are no measures in place to control the risk)			Current Actions / Arrangements in place to control the risk	Net Score (as it is now)			Future Actions and / or Arrangement to control the risk	Manager Responsible	Risk Trend	Target Score (when all actions are completed / satisfactory arrangements in place)			
Likelihood	Impact	Gross Score		Likelihood	Impact	Gross Score				Likelihood	Impact	Gross Score	Target Date
(L)	(I)	(LxI)		(L)	(I)	(LxI)				(L)	(I)	(LxI)	
			<p>Driving including explanation of Fuel Consumption provided to workforce. 181 Trackers are now fitted to Fleet vehicles.</p> <p>F4. Transportation and Logistics operations currently being reviewed. The results will shape how vehicles across the authority will be specified, procured, and utilized. Whilst considering alternative fuel options, and pool cars availability.</p> <p>E1. Interaction and engagement with staff and energy champions to</p>				<p>to promote better utilisation and limit wasted journeys to further improve CO2 performance. We are continuing to fit trackers to new vehicles that replace older vehicles. We are currently consulting on a Vehicle Management System Policy (which is an expansion on the originally perceived Vehicle Tracking Policy) which is weighted towards driving efficiencies out of operations and fleet ownership.</p>						

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Likelihood	Impact	Gross Score		Likelihood	Impact	Gross Score				Likelihood	Impact	Gross Score	Target Date
(L)	(I)	(LxI)		(L)	(I)	(LxI)				(L)	(I)	(LxI)	
			<p>promote and raise awareness of energy conservation initiatives.</p> <p>F3 Revised Fleet Drivers Handbook has been distributed to all drivers. In-House training programme is nearing completion for all drivers of LGV's as part of the Driver CPC (Certificate of Professional competence) training. Driver CPC training has been completed by the deadline of 19th September 2014 for HGV drivers. Modules for the training include SaFED. (Safe and Fuel Efficient Driving)</p>				<p>F4. Transportation and Logistics operations currently being reviewed. The results will shape how vehicles across the authority will be specified, procured, and utilized. Whilst considering alternative fuel options, and pool cars availability, All new vehicle requests are challenged by fleet services.</p>						

Gross Score (as if there are no measures in place to control the risk)			Current Actions / Arrangements in place to control the risk	Net Score (as it is now)			Future Actions and / or Arrangement to control the risk	Manager Responsible	Risk Trend	Target Score (when all actions are completed / satisfactory arrangements in place)			
Likelihood	Impact	Gross Score		Likelihood	Impact	Gross Score				Likelihood	Impact	Gross Score	Target Date
(L)	(I)	(LxI)		(L)	(I)	(LxI)				(L)	(I)	(LxI)	
			<p>techniques, thereby reducing fuel consumption and carbon emissions. All new starters receive driver Training</p> <p>E1 Continue to promote energy awareness programmes and the positive contribution low cost no cost action can have on the council's energy costs.</p>										

3. Encourage public utilisation of recycling facilities and services

Progress Status	Progress RAG	A	Outcome RAG	G
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Reported recycling figures have increased in the first 6 months of this year when compared to 2013/14 with the current rate at 58.5 %. Landfill waste is also down on this time last year by 480 tonnes. With 40.1% of municipal waste currently being sent to landfill (13/14 outturn 41.57%)

Recycling rates have increased at the Council's HWRC's from 58% to 62% for Quarters 1 and 2. This has been achieved partly through the introduction of a ban on vans using six of the eight sites which allows those sites where vans can be received to engage with the public to facilitate and encourage recycling of the waste

The Recycling Team have attended a number of local events during the summer in order to promote the service and provide containers to residents if they require them. The team have also carried out door knocking campaigns in areas of low participation specifically around the collection of food waste.

Achievement will be measured through:

- Improved recycling performance

Achievement Measures	Lead Officer	2013/14 Baseline Data	2014/15 Target	2016/17 Aspirational Target	Current Outturn	Performance RAG	Outcome Performance Predictive RAG
WMT/011 - The percentage of local authority municipal waste received at all local authority household waste amenity sites that is prepared for reuse, recycled or of source segregated bio waste that is composted or treated biologically in another way.	Chief Officer – Transport & Streetscene	54.47%	67%	75%	62%	A	A

Risk to be managed - Securing sufficient funding for renewable energy schemes

Gross Score (as if there are no measures in place to control the risk)			Current Actions / Arrangements in place to control the risk	Net Score (as it is now)			Future Actions and / or Arrangement to control the risk	Manager Responsible	Risk Trend	Target Score (when all actions are completed / satisfactory arrangements in place)			
Likelihood	Impact	Gross Score		Likelihood	Impact	Gross Score				Likelihood	Impact	Gross Score	Target Date
(L)	(I)	(Lxl)		(L)	(I)	(Lxl)				(L)	(I)	(Lxl)	
H	H	R	Continue to invest in Renewable energy systems that are eligible for the Governments Feed In tariff and Renewable Heat incentive payments, though the significant reduction in the renewable Energy Budget (£300k down to £100K) will have a negative impact. Explore options for much larger renewable schemes	L	M	G	Work with APSE and other suitable partners to ultimately develop large scale energy schemes, that will make a significant contribution to the County's Energy needs	Chief Officer, Planning and Environment & Chief Officer Streetscene & Transportation	↓	L	M	G	Sep 2014

Risk to be managed - Securing sufficient funding to maintain the Council's recycling service.

Gross Score (as if there are no measures in place to control the risk)			Current Actions / Arrangements in place to control the risk	Net Score (as it is now)			Future Actions and / or Arrangement to control the risk	Manager Responsible	Risk Trend	Target Score (when all actions are completed / satisfactory arrangements in place)			
Likelihood	Impact	Gross Score		Likelihood	Impact	Gross Score				Likelihood	Impact	Gross Score	Target Date
(L)	(I)	(LxI)		(L)	(I)	(LxI)				(L)	(I)	(LxI)	
H	H	R	Continue to provide a regular high quality collection service to maintain/increase public participation. Continue to operate the recycling bulking facility to ensure high quality recycling to capture high end returns of income.	M	M	A	Investigate areas of good practice in other LA's to help increase participation by residents and increase income potential. Improve standards of meet and greet at Household Recycling Centre to divert recyclable waste from landfill.	Chief Officer, Planning and Environment & Chief Officer Streetscene & Transportation	↓	L	L	G	2018/19

Risks to be managed - Securing sufficient funding for further street lighting improvement programmes.

Gross Score (as if there are no measures in place to control the risk)			Current Actions / Arrangements in place to control the risk	Net Score (as it is now)			Future Actions and / or Arrangement to control the risk	Manager Responsible	Risk Trend	Target Score (when all actions are completed / satisfactory arrangements in place)			
Likelihood	Impact	Gross Score		Likelihood	Impact	Gross Score				Likelihood	Impact	Gross Score	Target Date
(L)	(I)	(Lxl)		(L)	(I)	(Lxl)				(L)	(I)	(Lxl)	
H	H	R	<p>Continue to invest in energy saving schemes. Currently Flintshire have installed 350 new lanterns including over 300 dimming units and over 500 new trimming photocells.</p> <p>Investigation into part night switching in 2 locations which will reduce carbon and energy usage whilst supporting extra benefits such as dark nights at sky. Both areas conflict with the current policy so are unable to be installed.</p> <p>On going replacement of old</p>	L	M	G	<p>Further Investigation into part night switching in areas of approved and evaluated locations which will reduce carbon and energy usage whilst supporting extra benefits such as dark nights at sky.</p> <p>Replace old photocells with new trimming photocells which switch on and off earlier and reduce the hours of</p>	<p>Chief Officer, Planning and Environment & Chief Officer Streetscene & Transportation</p>	↓	L	L	G	Apr 2015

			<p>sign and bollard technologies (to LED). Within Q1 Flintshire have replaced 27 units.</p> <p>Continue to Dim lighting units by 30% to reduce the level of energy and illumination output for a period of time during dark hours (2200hrs – 0600hrs).</p> <p>Continue to Replace old signs and bollards to LED which reduce operational visits to units and to reduce the level of energy usage</p>				<p>operation by 20 hours per unit per year.</p>					
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4. Encourage residents and employees to use more sustainable forms of transport.

Progress Status

Progress RAG

G

Outcome RAG

G

The Local Transport Funded Broughton to Saltney cycle way scheme is currently programmed to start on site January 2015. The works should be completed within 10 to 13 weeks. Feasibility studies on two cycle links – DIP Zone 3 /4, Sandycroft to Airbus will be completed in Q3 for delivery in respect of any potential available Welsh Government funding 2014/2015. The Talacre to Ffynnogroew shared use path has now been completed with an official opening taking place on the 2/10/2014. The installation of 3 extra cycle/pedestrian counters to be installed on this link and existing network.

We are currently developing a measure in relation to the use of buses which will establish cost per passenger.

Achievement will be measured through:

- Increased use of cycleways

Achievement Measures	Lead Officer	2013/14 Baseline Data	2014/15 Target	2016/17 Aspirational Target	Current Outturn	Performance RAG	Outcome Performance Predictive RAG
IPE1M7 - Number of users on the cycleway networks evidenced through counter data	Chief Officer – Transport & Streetscene	82,500 users	120,000 users	150,000 users	Q2 = 113,687 users	G	G