

Improvement Objective

IO 8 - Reducing our carbon footprint and improving our sustainability

Outcomes:

- A. Reducing CO2 emissions from our buildings and street lighting
- B. Reducing the impact of fuel poverty on householders in Caerphilly CBC, taking advantage of successful funding bids to tackle properties in specific areas of the borough
- C. Raising awareness of climate change issues with our staff and residents of the county borough to enable them to reduce their greenhouse gas emissions
- D. Reducing the impact of our travel and transport to reduce carbon emissions

Other evidence links:

 [IO 8 Media Releases - Evidence 2011-12](#)

 [Mar 2012 - OA 7 B \(IO 8\) - Energiser Invitation](#)

 [IO 8 - Evidence - SD & LE Team - Annual Report 2010-11](#)

 [IO 8 - Evidence - SD & LE Team - Annual Report 2011-12](#)

A greener place Man gwyrdach



IO 8 - Reducing our carbon footprint and improving our sustainability

-

[2012/13 Progress Summary \(April to Sept\)](#)

During the first 6 months of this year, we have continued to make good progress against this objective. Some of the key achievements include:

- £4.5 m has been secured to improve the energy efficiency of 1,100 houses in the county borough under the Community Energy Saving Programme (CESP).
- Over £200,000 additional funding has been secured under the **~Arbed programme**, and further bids submitted under Arbed phase 2.
- The continuing work with schools mean that 57% of our schools now have a green flag under the Eco Schools programme.
- A Green Fleet Review has been undertaken of the Council's use of vehicles, including employee's use of their own vehicles on Council business. The report has identified 7 main recommendations which are being evaluated
- Combined heat and power units are being installed at Caerphilly and Heolddu leisure centres, with a total project cost of £269,000
- £75,000 has been provided from the Local Authority Energy Fund (LAEF) to improve controls on street lighting. (Phase 2 of current works = 1,000 street lamps - enhance and improve timing of lamps on/off, maintenance and the levels of light emitted).

~Arbed programme: is a strategic energy performance investment programme (Welsh Government) that was established in 2009 to bring environmental, social and economic benefits to Wales and coordinate investment into the energy performance of Welsh homes.

[Reduce climate change, help eradicate fuel poverty and boost economic development and regeneration].

Phase 1 (2009) and Phase 2 (2012).

IO 8 - Reducing our carbon footprint and improving our sustainability

Risks/Threats

Title	Original Date	Original RAG	Original Likelihood of occurrence	Original Impact	RAG	Likelihood of occurrence	Impact	Comment
IO8 R1 Failure to better manage, control and reduce our energy/fuel consumption will result in spiralling energy costs, which will place an increasing financial strain on the Authority and its residents/tenants	01 Apr 2010	◆	3	4	◆	3	4	There have been increases in energy costs. Energy efficiency improvements and the installation of renewable energy work is underway. Risk remains the same
IO8 R2 Schools and Housing Tenants may not fully understand and make best use of the modern technologies installed in their buildings/properties.....	01 Apr 2010	◆	3	4	◆	3	4	Work is ongoing to raise awareness of energy efficiency and renewable energy technologies

IO 8 - Reducing our carbon footprint and improving our sustainability

Actions - A. Reducing CO2 emissions from our buildings and street lighting

Title	Comment	Overall Status	% Complete	RAG
i. Good Housekeeping	<p>During April to Sept 2012, some of the key works has been:</p> <ul style="list-style-type: none"> -9 energy audits have been generated and presented to building managers. - 74 Display Energy Certificates have been generated, which is equivalent to the number generated in the whole of 11/12. - TY Penallta energy report is still ongoing, plant room issues have been identified and solutions are being sought. Research into the Ground Source Heat Pump and controls to enable better control of the buildings energy consumption and temperature comfort levels. - The carbon trust are developing an energy report using SKM Ltd, with a view to improving energy efficiency within the Tredomen Gateway building. - The Energy Management Team has provided greater control of heating at Ysgol penallta where the school were suffering with overheating issues. - Training is being arranged for Leisure Centre staff, covering the topics of good housekeeping, invest to save, maintenance and controls. This will be part funded by the Carbon Trust with an overall cost of £450. - As landlord of Islwyn Indoor Bowls Centre, the authority's energy management team has assisted the centre with reducing an electricity debt of £136k+ down to £40k. The centre also received a free energy audit, display energy certificate, advice and further assistance regarding invest to save technologies and renewable energy. - Building Energy management Training at Pontllynn Primary. - Efficiency awareness at Tyn Y Wern Primary <p>Governor training at Oakdale Comprehensive on energy efficiency.</p> <ul style="list-style-type: none"> - Welsh Water delivered independant water conservation surveys/reports to numerous schools with recommendations on ways to improve/reduce water consumption levels. - Energy reporting has occurred at SDAP and the Carbon Group meeting. 	In Progress	80	⚠
ii. Invest to save	<p>During April to Sept 2012, some of the key works has been:</p> <ul style="list-style-type: none"> - Street Lighting has taken another LAEF loan to improve control on street lighting at a cost of £75k with projected annual carbon savings of 57 tonnes - A LAEF loan has been provided for a replacement swimming pool cover at Bedwas leisure centre at a cost of £3,685, with annual carbon saings of 6 tonnes. - The head of leisure has signed up to two combined heat and power units at Caerphilly and Heolddu leisure centre. Total project cost of £269k with annual carbon savings of 110 tonnes. - Although no funding is available at present, the authority is investigating lighting improvements for Islwyn Indoor Bowls, which if installed, est cost £20k would help reduce their electricity costs significantly. - Heat recovery technology appraisal report for Caerphilly and Risca swimming pools was developed by an external consultant, and £200k plus was allocated for the technology, the authority is considering the options. 	In Progress	80	⚠

IO 8 - Reducing our carbon footprint and improving our sustainability

Actions - A. Reducing CO2 emissions from our buildings and street lighting

Title	Comment	Overall Status	% Complete	RAG
iii. Asset management	<p>During April to Sept 2012, some of the key works has been:</p> <ul style="list-style-type: none"> - The ESIS building is no longer under Caerphilly CBC control, landlord status has transferred to Rhondda Cynon Taff, which improves Caerphilly's carbon emission and future Carbon reduction Commitment charges. - A new Cwm lfor Primary school has been built with significantly improved levels of insulation, energy efficient lighting, sophisticated building energy management controls and a PV instalation. 	In Progress	80	⚠
iv. Renewable Technology	<p>During April to Sept 2012, some of the key works has been:</p> <ul style="list-style-type: none"> - Although no funding is available at present, the authority is investigating photovoltaic panels for Islwyn Indoor Bowls, which if installed, est cost £62.5k would help reduce their electricity costs significantly. -The newly built Cwm lfor Primary school has a PV array installed. 	In Progress	80	⚠

IO 8 - Reducing our carbon footprint and improving our sustainability

Evidence/Measures - A. Reducing CO2 emissions from our buildings and street lighting

Period	Title	Actual	Target	Intervention	RAG	Result 12 Months Ago	Comment
2012/13	% of schools with the highest (green flag) award under the Eco Schools programme		60.00	55.00		58	Annual measure. However 57% of schools have a green flag as at the end of Sept '12.
2012/13	Average annual carbon emission savings (Tonnes of CO2) from Council buildings - Resulting from LAEF schemes that have been implemented		300.00	150.00		230	Annual measure. However, for the first 6 months of 12/13 we have identified potential carbon savings of 172 tonnes from projects implemented to date.

IO 8 - Reducing our carbon footprint and improving our sustainability

Actions - B. Reducing the impact of fuel poverty on householders in Caerphilly CBC, taking advantage of successful funding bids to tackle properties in specific areas of the borough

Title	Comment	Overall Status	% Complete	RAG
i. Retrofitting homes with innovative measures including, solid wall insulation and renewable technologies such as solar panels and heat pumps	A community energy saving programme has commenced within 5 LSOA's to install approx 470 external wall insulation, 200 boiler replacements and 327 Loft Insulation Upgrades. Approval received from the Welsh Government to undertake an ARBED 2 project to the private residents at Fochriw which will aim to upgrade properties to a minimum SAP value of 65.	In Progress	65	⚠
ii. Identifying a number of properties in areas of deprivation to receive cavity and loft insulation (free of charge to the home owner /tenant) to help reduce fuel bills	A number of cavity wall insulation / loft insulation works are being undertaken as part of the Welsh Governments NEST scheme and the Energy Suppliers Carbon Emissions Reduction Target (CERT) scheme.	In Progress	65	⚠
iii. Running programmes of replacement of old boilers with condensing boilers and increasing the number of renewable energy installations	See progress comment Bi above. In 11/12, a comprehensive database was completed, identifying 3500 properties with SEDBUK G rated appliances (e.g. Open Flue back boilers/fires). Starting this year and for the next 5 years, a replacement programme was scheduled to replace 700 units per year with SEDBUK A rated condensing appliances.	In Progress	35	⚠
iv. Actively seeking to secure funding to enable us to continue to undertake energy efficiency improvements to properties in the county borough	Additional funding secured under Arbed. Applications submitted for Arbed 2 funding. £4.5m secured for energy improvement works secured under CESP funding programme. Activity ongoing. Funds secured to date in order to undertake improvements in Energy Efficiency to properties within the County Borough stated above	In Progress	60	⚠

Evidence/Measures - B. Reducing the impact of fuel poverty on householders in Caerphilly CBC,.....

Period	Title	Actual	Target	Intervention	RAG	Result 12 Months Ago	Comment
Q2 12/13	Number of farms and rural businesses advised on sustainable energy issues	41.00	25.00	20.00	⚠	9	Monitored Quarterly and Accumulative.
Q2 12/13	Number of Solar energy efficiency measures installed (Borough wide stock)	158.00	150.00	100.00	⚠	284	Monitored Quarterly and Accumulative. It is difficult to set a target for this measure, as results are very dependant upon obtaining funding to install renewable technologies. Targets are set to simply contextualise results, as any/all installations are beneficial and therefore a positive result.
2012/13	Stock with Energy Rating SAP 65+ compliant with WHQS		10713.00	10218.20		10513	Annual Measure. However, at Sept 2012, the stock with Energy Ratings SAP 65+ = 10,439. This is because a number of properties have had CWI removed due to water ingress so this will alter SAP ratings also properties have yet to have measures being undertaken inputted into the system. Target was originally set in 10/11 at 10756, but this was revised to 10,713 (as part of IO8) at the beginning of 12/13.

IO 8 - Reducing our carbon footprint and improving our sustainability

Actions - C. Raising awareness of climate change issues with our staff and residents of the country borough to enable them to reduce their greenhouse gas emissions

Title	Comment	Overall Status	% Complete	RAG
i. Promoting the uptake of the Climate Change Commitment with individuals, businesses and organisations will be a key element of delivering this element of the objective	Although this action was completed in 2011/12, we still continue to receive pledges.	Complete	100	➔
ii. Plant a further 2 climate change woodlands, and working with our schools to ensure that more of them achieve Green Flag status under the Eco Schools programme	This action was completed in 2011-12, with four Climate Change Woodlands being planted: <ul style="list-style-type: none"> • The Sir Harold Finch Memorial Park Climate Change Woodland. • Darran Valley Climate Change Woodland Restoration Project. • Fochriw and Deri Schools' Climate Change Woodland. • Plas Mawr Community Centre. However we now intend to plant a further 2 woodlands in 2012/13	Complete	100	➔
iii. Working with our schools to ensure that more of them achieve Green Flag status under the Eco Schools programme	Although we have completed the actions for 2011/12 we are undertaking additional work in 2012/13	Complete	100	➔
iv. Expand the energisers programme and working with our housing partners to help residents to reduce their carbon emissions	For the worked planned in 11/12 we declared that this action was completed. However, to date, work is still ongoing with 14 energisers already recruited. United Welsh Housing Association and Charter Housing are currently in the process of organising training with the Energy Savings Trust. energizers expanded and significant work undertaken with Housing partners	Complete	100	➔
v. Through our Rural Development Plan Programme, work closely with farms and the rural community to address climate change issues and to promote sustainability	Although this work was complete for 2011/12, we have identified the need for ongoing work in 2012/13	Complete	100	➔

IO 8 - Reducing our carbon footprint and improving our sustainability

Evidence/Measures - C. Raising awareness of climate change issues with our staff and residents of the country borough to enable them to reduce their greenhouse gas emissions

Period	Title	Actual	Target	Interventio	RAG	Result 12 Months Ago	Comment
2012/13	Number of Climate Change Woodlands created		2.00	1.00		4	Yearly measure. 2 woodlands are planned to be planted this winter
2012/13	The average level of understanding of SD by our staff		2.60	2.50		2.50	Bi-ennial Survey. Next due 2012/13.
2012/13	The number of education for sustainable development training sessions		80.00	60.00		102	Annual measure. However 37 events have been run between April and the end of Sept '12. The aim is to run less training sessions with more schools attending each session, reducing the amount of officer time required to support schools on sustainable development, and encouraging schools to work together to support each other
2012/13	The number of individuals that have signed the Climate Change Commitment		0.00	0.00		3953	Measure Deleted for 12/13.
2012/13	The number of organisations that have signed the Climate Change Commitment		0.00	0.00		50	Measure Deleted for 12/13.

IO 8 - Reducing our carbon footprint and improving our sustainability

Actions - D. Reducing the impact of our travel and transport to reduce carbon emissions

Title	Comment	Overall Status	% Complete	RAG
i. Take positive steps to encourage alternative modes of transport	11 Sustainable travel events held between April and Sept 2012	Partially Completed	90	⚠
ii. Encourage our staff to 'cycle to work' or 'car share'	Ongoing programmes, events and initiatives continue to raise awareness of the importance of sustainable transport, and the options available	Partially Completed	95	⚠
iii. Improve the use of our fleet vehicles	A green fleet review has been undertaken and the recommendations are being evaluated	Partially Completed	80	⚠

Evidence/Measures - D. Reducing the impact of our travel and transport to reduce carbon emissions

Period	Title	Actual	Target	Intervention	RAG	Result 12 Months Ago	Comment
2012/13	% of our staff that travel to work in a car on their own		70.00	65.00		70.3	Bi-ennial Staff Survey. Next due 2012/13.
Q2 12/13	Number of staff on our "Car Share database"	339.00	360.00	330.00	⚠	307	This measure records the number of staff maintained on the care-share register.
2012/13	Number of sustainable Travel events held		12.00	10.00		13	Annual measure. However, 11 events have been held up to the end of September 2012
2012/13	The number of staff on the cycle to work scheme		200.00	180.00		221	Annual measure. This measure records the number of staff maintained on the cycle to work register.