



# Sustainable Development & Living Environment Team Annual Report 2014 - 2015



A greener place    Man gwyrdach



## Contents

Introduction . . . . .	1
Executive Summary. . . . .	2
Sustainable Council. . . . .	3
Education for Sustainable Development & Global Citizenship . .	25
Greener Caerphilly . . . . .	35
Rural Development Plan. . . . .	48
Monitoring and Measuring Progress . . . . .	54
Sustainable Development and Living Environment Team. . . . .	56

# Introduction

Sustainable development is one of the central principles guiding the work of Caerphilly County Borough Council. The Single Integrated Plan provides the overarching vision of a sustainable county borough, with the Authority's commitment and contribution to this shared partnership vision set out in "Living Better, Using Less", the Authority's Sustainable Development Strategy.

This report highlights the work of the Sustainable Development & Living Environment (SD & LE) Team in 2014/15.

The Team works in partnership with the Sustainable Development Advisory Panel (Members Panel), Sustainable Development Core Group (Officers & Members Group), Rural Development Plan Team and the Greener Caerphilly Outcome Group. It should be noted that this report does not seek to identify all sustainable projects throughout the Authority, but identifies areas where the SD & LE Team, Core Group, Sustainable Development Advisory Panel (SDAP) or Greener Caerphilly Outcome Group have been involved. It is part of the role of these 4 groups to provide support and to promote a culture where sustainable projects can develop with or without their direct support.

The Sustainable Development & Living Environment Team contributes to the objectives set out in the following Council strategies:

- Corporate Improvement Plan
- "Living Better, Using Less", the Council's Sustainable Development Strategy 2008
- Carbon Reduction Strategy
- Corporate Travel Plan
- Regeneration & Planning Division Service Improvement Plan

The work also contributes to the objectives set out in the following partnership strategies:

- Caerphilly County Borough Single Integrated Plan
- Caerphilly County Borough Education for Sustainable Development & Global Citizenship (ESDGC) Strategy
- Rural Development Plan

The work of the Team is divided under the following four headings:

- Sustainable Council
- Education for Sustainable Development
- Greener Caerphilly
- Rural Development Programme, Sustainable Energy

This Annual Report is structured to reflect these areas of work.



# Executive Summary

2014/15 was an important year for sustainable development in Wales with the Well-Being of Future Generations (Wales) Act achieving Royal Assent. From April 2016 the Act will place a duty on public bodies in Wales, including local authorities, to make decisions that leave a positive legacy for our children, and children's children. Members of the Sustainable Development & Living Environment (SD & LE) Team have been involved in various working groups to develop the legislation and guidance, and to identify what the Authority will need to do to comply with the duty.

The SD & LE Team continues to raise awareness of the key sustainable development issues that affect the Authority, and to implement projects designed to demonstrate the principles of sustainable development and to improve the sustainability of the Authority. However a staff questionnaire, completed by over 1,000 employees, has identified that levels of understanding of sustainable development are falling.

The Education for Sustainable Development work continues to go from strength to strength, demonstrating the benefit of employing a dedicated ESD Officer.

During 2014/15 the Team has undertaken joint projects and given specific support to Services including Planning, ICT, Procurement, Property and Housing.

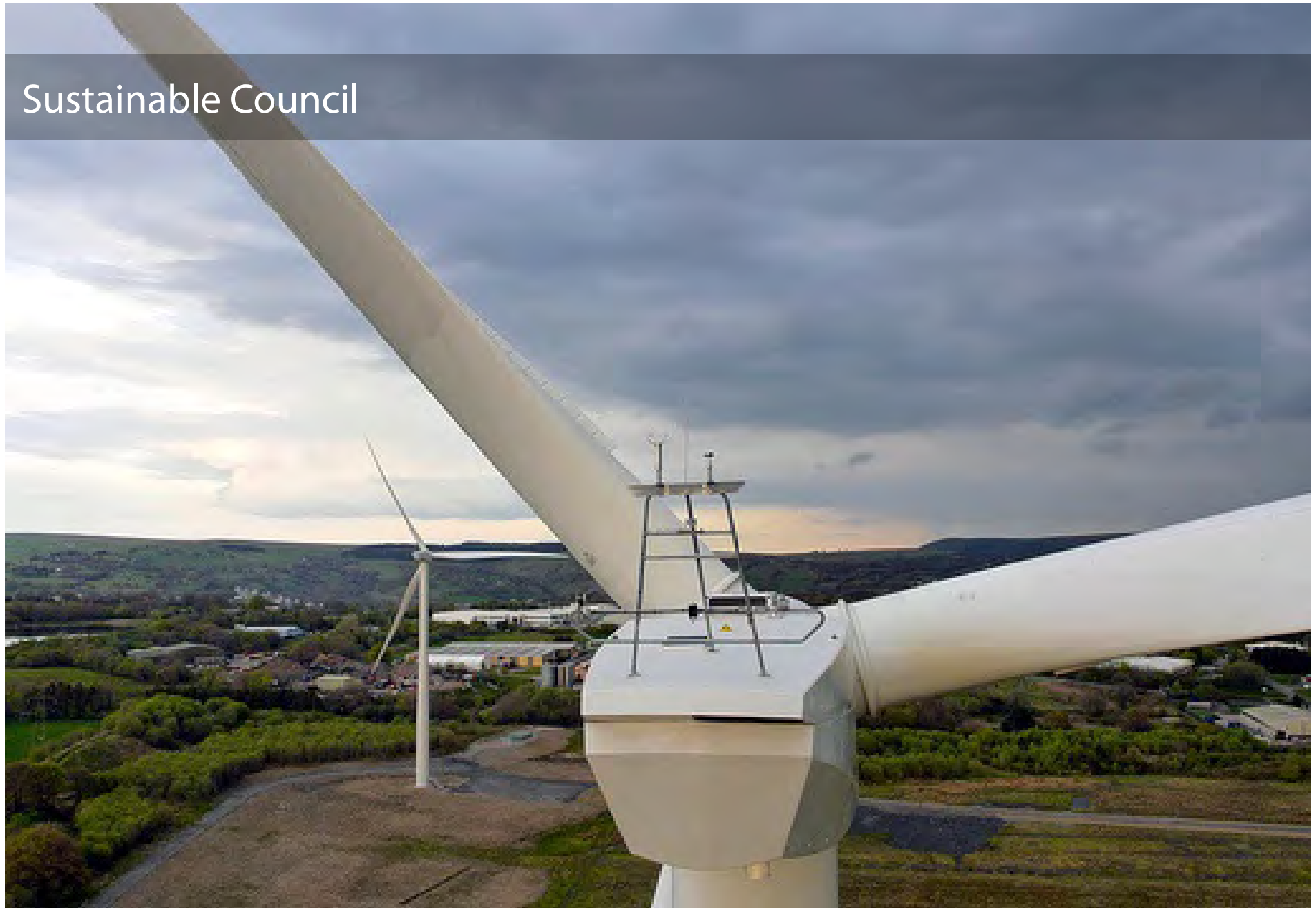
The Team co-ordinated the transition of the Living Environment Partnership of the Community Strategy into the Greener Caerphilly Outcome Group of the Caerphilly Single Integrated Plan. The Team also continues to co-ordinate the work of the Greener Caerphilly Outcome Group to ensure that we maximise the benefits of working in partnership on environmental issues. In 2014/15 this has included co-ordinating the work funded by the Authority's Community Scheme Funded, Local Environmental Quality Small Grants programme.

The Team continued to deliver the Sustainable Energy element of the Rural Development Plan (RDP) up until 31st December when the programme closed. Work completed up until this time included raising awareness of sustainable energy and climate change issues with farms and rural businesses in the eligible rural wards.

## Some key achievements in 2014/15 include:

- Assessing the Authority's ability to adapt to climate change which involved interviews and consultation with 43 senior officers from across all 18 of the Authority's Services.
- 71% of our schools have achieved a Green Flag (the highest award) under the Eco Schools programme. Ten schools have achieved their second Eco School green flag award, with twenty-two schools also achieving their third flag and working towards their platinum award. Sixteen schools have achieved the coveted Eco Schools Platinum Award.
- Sustainable Energy advice was given to 51 farms and rural businesses in 2014/15
- The SD & LE Team secured a total of £126,037 of funding for projects in 2014/15.

# Sustainable Council



# Sustainable Council

The Council has had a long commitment to sustainability and approved its first sustainable development policy in 1997. It has successively built on this foundation. In 2008 the Council published its **Sustainable Development Strategy, “Living Better, Using Less”**, which sets out the approach that the Authority is taking to sustainable development and our vision for a sustainable county borough. It sets out our strategy for tackling the issues and explains how we will manage and monitor the process and how we will report on progress.

2014/15 was an important year for sustainable development in Wales with the preparation and consultation on legislation to require public bodies in Wales, including local authorities, to make decisions that leave a positive legacy for our children, and children’s children, and to report on how we are complying with the Bill from 2015/16.

## The Well-Being of Future Generations (Wales) Act

The Bill was tabled in July 2014, as the start of its legislative journey through the National Assembly.

The Act is in 4 parts:

- Part 1: Introduction and Key Concepts
- Part 2: Overview of the main provisions
- Part 3: Establishes the office of Future Generations Commissioner for Wales
- Part 4: Establishes a Public Services Board for each local authority in Wales

The general purpose of the Act is to ensure that the governance arrangements of public bodies, including local authorities, for improving the well-being of Wales take the needs of future generations into account. The aim is for public bodies to improve the economic, social and environmental well-being of Wales in accordance with the sustainable development principles

The Act sets out 7 well-being goals against which all public bodies must set and publish well-being objectives that are designed to maximise their contribution to the achievement of these well-being goals. These are:

1. A prosperous Wales
2. A resilient Wales
3. A healthier Wales
4. A more equal Wales
5. A Wales of cohesive communities
6. A Wales of vibrant culture and thriving Welsh language
7. A globally responsible Wales



## Sustainable Development Principle.

In applying the sustainable development principle the Act requires that public bodies take into account:

- The importance of balancing short-term needs with the need to safeguard the ability to meet long-term needs.
- The benefits of taking an integrated approach by considering how: an objective may impact upon each of the well-being goals and the social, economic and environmental aspects and; the impact of the body's objectives on each other and upon other public bodies' objectives.
- The importance of involving those with an interest in the objectives, seeking views and taking them into account.
- How collaborating with any other person could assist the body to meet its objectives, or assist another body to meet its objectives.
- How deploying resources to prevent problems occurring or getting worse may contribute to meeting the body's objective, or another body's objectives

## Reporting

**National Indicators and Annual Well-Being Report.** The Welsh Ministers must publish national indicators that may be applied to measuring progress towards the achievement of well-being goals. They must then also report annually on progress towards the goals by reference to the indicators.

**Future Trends Report.** The Welsh Ministers must, within 12 months after the general election, publish a report that contains predictions of likely trends in the economic, social and environmental well-being of Wales; and any related analytical data and information that the Welsh Ministers consider appropriate

**Annual Reports by other public bodies.** Public bodies covered by the act, including local authorities, are required to publish annual reports of the progress they have made in meeting their well-being objectives. At the same time the public body must review its well-being objectives, and if they are no longer considered appropriate they must amend them and include an explanation of reasons for any amendment.

**In April 2015 the Bill received formal Royal Assent and became the Well-Being of Future Generations (Wales) Act.**

## WLGA Early Adopters programme

As the Well-Being of Future Generations (Wales) Act will require local authorities to report on how they are complying with the duty from April 2016, the WLGA developed an "early adopters" programme for local authorities to start to work towards the requirements of the Bill.

On the 21st August 2014, the Corporate Management Team approved a recommendation for Caerphilly to join the WLGA early adopters programme. Caerphilly being one of eleven local authorities and three national parks that joined the programme.

The aim of the support provided by the WLGA was to help participants to take some initial steps to position their authority to respond to the Bill's requirements. Over time, it is anticipated that this should help authorities to develop new ways of working that maximise the benefits of an SD approach.

### The following support was provided by the WLGA:

- a diagnostic self-assessment tool to help an authority establish its current position and priorities in relation to requirements of the Bill and the 'building blocks'

- participation in a webinar series to develop in-house expertise in vital areas (e.g. foresighting and the production of ward-based scenarios; integrated reporting; building SD into the budget setting process)
- links to working groups on integrated reporting and indicator development
- invitations to free events on policy specific issues such as climate change adaptation and flood and water issues
- networking with other early adopters to share best practice and offer peer-to-peer assistance
- access to a wide range of support materials via the WLGA website, which is currently being revamped to provide additional resources

Importantly, early adopters were given an opportunity to help shape the guidance to support implementation of the Bill. This included an opportunity for local authorities to engage with the WG, WAO and WLGA to shape the guidance covering the reporting, monitoring and requirements of the Bill.

The first part of the programme involved senior officers from the authority completing an on line

diagnostic questionnaire to establish the starting point for each of the early adopter authorities. The self-assessment questionnaire was structured around the ten building blocks that WLGA believe need to be in place to respond effectively to the new legislation. Twelve senior officers were nominated by CMT to complete the questionnaire.

The responses to the questionnaire were analysed by the WLGA and a report produced that identified the current situation and potential areas for action.



### Corporate Sustainable Development Annual Report

In January 2014, the Sustainable Development Advisory Panel endorsed a recommendation to produce a Corporate Sustainable Development

Annual Report each year, starting with a report for 2013/14. The preparation of this report is seen as an important step by the Authority in preparation for the introduction of the “Future Generations Bill” by Welsh Government in the summer of 2014. However without the specific details of the reporting requirements to comply with the Act, this work has been put on hold.

### Service Plan, Sustainable Development Statement

Each year, every service within the Authority produces a Service Plan, which sets out what they will achieve and how they will deliver their services. The Service Plan process has a key role to play in ensuring that services are considering economic, social and environmental issues related to their service delivery.

Since 2004/05 each service has been required to complete the SD Integration Tool as part of the Service Plan process. The Integration Tool was a simple self-assessment form for services to complete before writing their Service Improvement Plan. It enabled them to assess their contribution to the 28 objectives of the Community Strategy. The 28 objectives taken together are an expression of sustainable development in Caerphilly county borough, therefore by completing the tool services



were assessing their contribution to the overarching principles of sustainable development and equalities.

In 2006/07 the Integration Tool was updated to require evidence in support of scores, partly in response to the new Wales Programme for Improvement requirements.

For 2013/14 reporting, the previous SD Integration Tool was replaced with a new SD Statement for services to complete. This was for 3 main reasons:

1. The previous tool asked services to score their contribution to the 28 objectives of the Community Strategy. From March 2013 the Community Strategy was replaced by a Single Integrated Plan, which contains 6 outcome areas for improving and reporting.
2. The Welsh Government will introduce their "Future Generations Bill" in 2014 which will require local authorities to make SD their central organising principle, and to evidence how they are doing this. The SD Statement will provide key evidence that this is being done.
3. The Welsh Government has issued statutory guidance on the requirements for reporting under the Climate Change Act 2008. Local

authorities are required to report annually on achievements and progress on climate change adaptation. The climate adaptation section of the SD Statement will provide the information required to compile a corporate climate adaptation report.

For 2015/16 the SD Statement element of the Single Plan has been removed. This will be reviewed when the details of the requirements of the Well-Being of Future Generations Act are published.



## Regeneration & Planning Division's Service Improvement Plan

The work of the SD & LE Team contributes to the Regeneration & Planning Division's own Service Improvement Plan (SIP). The Team is responsible for 4 objectives within the SIP:

1. To take the lead on sustainability issues within the Council and to promote a better awareness and understanding of sustainable development amongst staff, Members and residents of the county borough.
2. To drive the Eco Schools programme in Caerphilly County Borough and to support all schools to enable them to achieve an Eco Schools award.
3. To support the Living Environment Partnership and its Working Groups, to enable them to deliver against their respective Community Strategy Objectives, and to support collaborative working with the other thematic Partnerships wherever practicable.
4. To lead on the Living Environment Partnership's work on Climate Change, developing a delivery mechanism for the Caerphilly Climate Change Strategy and the roll-out of the Climate Change Commitment.

## Sustainable Development Advisory Panel

The Sustainable Development Advisory Panel (SDAP) was set up in February 2002. It consists of 11 elected members across all political parties. In 2014/15 the Panel was chaired by the Cabinet Member with responsibility for Sustainable Development. SDAP has a remit to look at any aspect of sustainable development within the Council, or within the wider county borough, and makes recommendations direct to Cabinet. It is responsible for raising the profile and understanding of sustainable development with Members and officers, to the point that it becomes an automatic part of mainstream decision-making and action.

In 2014/15 SDAP met 4 times and received reports on a variety of topics including:



- Well-Being of Future Generations (Wales) Bill
- Nant y Cwm Farm, One Planet Development
- Maes Yr Onn Farm – how is it performing?
- Cyd Cymru Collective Energy Switching Scheme

## Sustainable Development Core Group

The Sustainable Development Core Group was established in 2000 to implement SD initiatives within the authority. Following the establishment of SDAP it provides support to SDAP, and together the 2 groups co-ordinate the mainstreaming of sustainable development in the Council and in the wider county borough.

The Core Group is made up of officers from different services across the authority. It is chaired by the Chair of SDAP to provide a link and to ensure the effective working relationship of the two groups.

## Sustainable Development Charter

In July 2011 Caerphilly County Borough Council signed the Welsh Government's Sustainable Development Charter. The aim of the Charter is to contribute to making Wales a sustainable nation by encouraging organisations to work with the Welsh Government to deliver sustainable development objectives.

By signing the charter, we have committed to make sustainable development our central guiding principle, and will promote and deliver wellbeing through our decisions and operations by:

- ensuring that all decisions promote long term, sustainable wellbeing of people (including employees) and communities;
- ensuring that all decisions take full account of, and where possible fully integrate, the various social, economic and environmental outcomes that are being sought;
- engaging with, and involving, the people and communities that will be affected by these decisions, so that working in partnership for sustainable development becomes part and parcel of the way we work.

We report annually on our work on sustainable development and progress towards achieving our commitments under the SD Charter.

More information on the Welsh Government's Sustainable Development Charter can be found at:



[Click to download the Welsh Government Sustainable Development Charter](#)

## Sustainable Development Strategy 2008, “Living Better, Using Less”

“Living better, using less” sets out the approach that the Authority is taking to sustainable development and our vision for a sustainable county borough.

### The objectives are:

#### Objective 1.

**To promote longer healthier lives**, with a target of ensuring an average life expectancy for a resident, wherever they live in the county borough, of at least the UK National average by 2030.

#### Objective 2.

**To promote fulfilled and satisfied lives**, with a target of ensuring an average life satisfaction rating for a resident of the county borough of at least the UK national average by 2030.

#### Objective 3.

**To consume less resources**, with a target of ensuring that the average ecological footprint for a resident of the county borough is 2.87 global hectares by 2030 (Based on a target of “one planet living” by 2050)

## Caerphilly Sustainability Index

The complex interaction of these three objectives is at the heart of what the strategy aims to achieve.

This interaction can be expressed by the following equation:

$$\text{Living better using less} = \frac{\text{Long, Healthy Lives x Satisfied Lives}}{\text{Resources Consumed}}$$

Calculated as:

$$\frac{\text{Life expectancy X Life satisfaction}}{\text{Ecological Footprint}}$$

The equation calculates the resource efficiency with which long, healthy and satisfied lives are delivered.

Whilst we need to improve well-being and quality of life (top of the equation) we must do it in a way that reduces the amount of resources we consume (bottom of the equation) to reduce the demand we place on the environment and natural resources.

As part of both the process of explaining and monitoring of the strategy we developed a Caerphilly Sustainability Index (CSI) in 2008,

which allows individuals to calculate their own sustainability score. By answering some simple questions individuals are given a score for each of the 3 elements of the equation as well as their overall sustainability score. The on-line version generates a report for each person who completes it, providing tips and sources of further advice, based on their answers. This work, developed in partnership with the New Economics Foundation (NEF) will hopefully result in action and behaviour change. For further information Visit: [www.sustainablecaerphilly.co.uk](http://www.sustainablecaerphilly.co.uk)

## Sustainable Development Website

The Sustainable Caerphilly website encourages people to live a more sustainable lifestyle by Living Better and Using Less. The website has been revamped and the new version went live in February 2015. It has five sections focusing on sustainable living, sustainable schools & ESDGC, the Rural Development Programme, a Greener Caerphilly and a sustainable council. The website also continues to feature the online questionnaire, the Caerphilly Sustainability Index, which allows people to find out how sustainable they really are.

The website provides lots of useful information for schools, businesses, residents and staff to help them adapt to a more sustainable lifestyle by reducing

costs, carbon emissions and their impact on the environment. The website will be updated as and when required to ensure the information provided is relevant to users.

For further information visit: <http://your.caerphilly.gov.uk/sustainablecaerphilly/>

### Sustainable CCBC Intranet Site

The Sustainable CCBC Intranet site has been designed to encourage staff to live and work more sustainably. The site has six sections focussing on Energy & Water, Health & Lifestyle, Travel and Transport, Procurement, Waste Minimisation and the Green Teams. The site also promotes the authority's salary sacrifice schemes, which include the "cycle to work" and "green car" schemes. The intranet site is updated as and when required to ensure staff are aware of new initiatives.



### Staff SD, health and wellbeing survey

A staff SD, health and wellbeing survey was developed by the SD and Health Improvement Teams to update indicators that both teams use to monitor understanding and progress in their areas. It was agreed that a combined questionnaire providing information for the Employee Health & Wellbeing Group would be the best use of resources and provide the best response rate. Questionnaires were sent electronically to all staff with access to the intranet. Additional work was done to ensure that employees in depots, canteens and in service where they did not have access to the intranet were engaged in the process. This was done by using the team meeting structures or by visiting depots to talk directly to staff.

In total 1,014 responses to the 2014/15 survey were received. Of the respondent 7% were school based and 51% mostly office based.

In comparison, the staff survey undertaken in November 2008 was sent out in the post to the homes of 1,000 staff randomly selected using the payroll system. 248 responses were received to that survey with 52.8% of respondents based within a school, and 25.7% mostly office based.

The staff survey undertaken in October 2007 was sent out to all staff using the payroll system. Out of the 9,000 employees, 8.6% of staff (777 employees) completed and returned the survey. Of these 23% were based within a school and 55% mostly office based.

Since reorganisation of Services leisure Services have moved from Education to Community & Leisure, and Corporate Services and Chief Executives have combined. This difference in the break down of the groups of respondents from the 3 surveys may mean that it is difficult to draw meaningful conclusions from direct comparisons of responses. The changes to the structure make it difficult to compare the results from the 3 surveys by Directorate.

### Sustainable Development Indicators.

As part of the survey, questions were included to obtain data on 4 SD indicators.

### Level of understanding of sustainable development

To assess levels of understanding of SD, respondents were asked to identify their level (1 – 5) using a flow chart. The higher the level the greater the understanding. Level 1 indicates that they have

never heard of the term sustainable development, whereas Level 5 indicates that the respondent understands the term, and the implication on their life.

Overall the average level of understanding of sustainable development from the 14/15 survey was 2.37. This was down from 2.5 in 2008 and further down from 2.6 in October 2007.

### Levels of understanding by Directorate

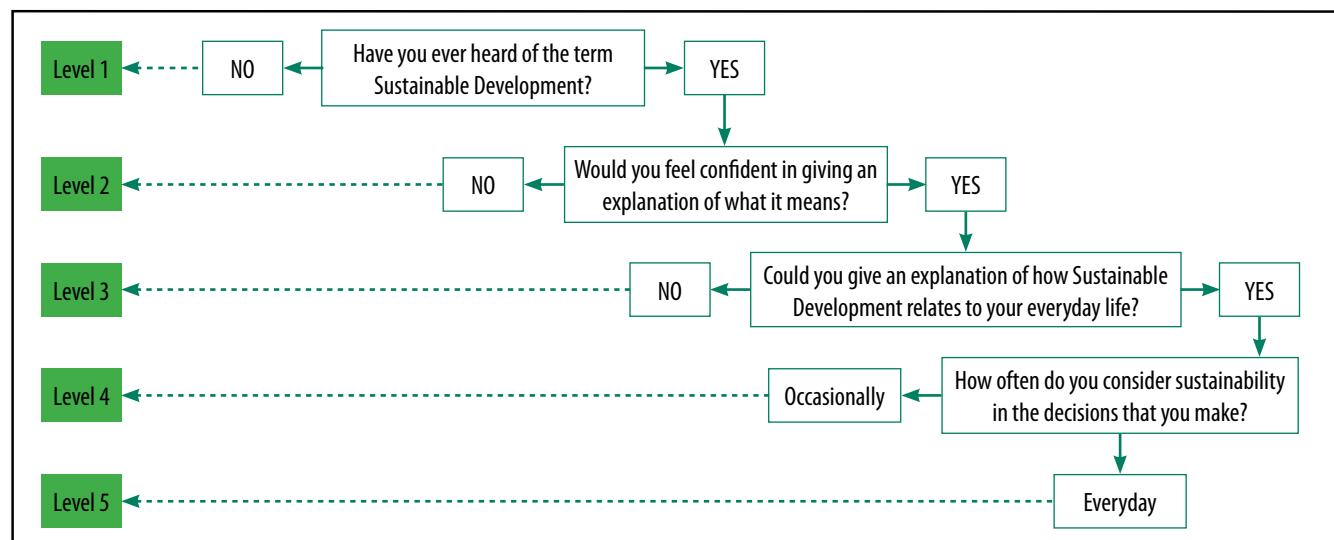
Responses to the 2014/15 survey show that there has been a slight decrease in the percentage of staff driving to work on their own since the 2007 staff survey. Car share percentage has decreased, but the

percentage of staff walking to work has increased.

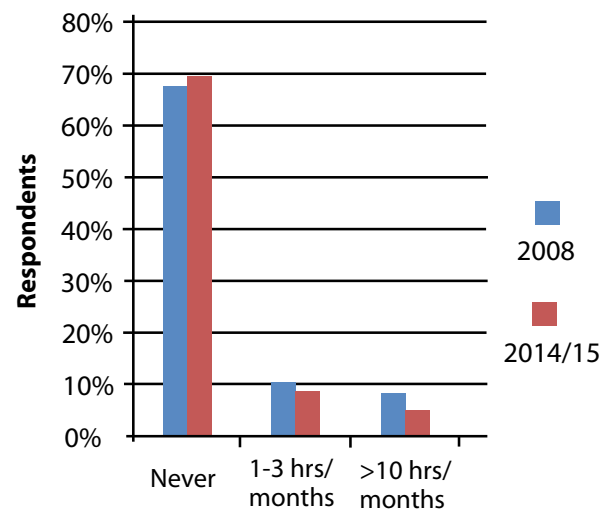
Directorate	Number of responses	Average level of understanding of SD
Corporate Services	269	2.61
Education & Lifelong Learning	198	1.98
Social Services	160	2.11
The Environment	293	2.59
Caerphilly County Borough Council	920	2.37

Thirty minutes of exercise 5 times per week is the recommended minimum amount of exercise to remain fit and healthy. Vigorous (e.g. sport, running, cycling) physical activity is more beneficial. The 2014/15 staff survey shows that the percentage of staff completing 30 minutes of vigorous exercise at least five times a week has decreased drastically since the 2008 staff survey. Just over a quarter of respondents do not take part in any light physical activity, however, 65% of respondents felt that they were physically active.

Levels of staff who undertake voluntary activity has decreased slightly since the 2008 staff survey.



**The percentage of staff who engage in voluntary activity in their local area**



## Sustainable Travel

Travel and transport account for 16% of the UK's emissions of CO<sub>2</sub>. The Sustainable Development Advisory Panel has identified travel and transport as a key sustainability issue for the Authority to address. The SD & LE Team has been involved in events and projects to raise awareness of the issues and to begin to take practical action to address their impact.

## Sustainable Travel Events

Six events promoting sustainable travel, and highlighting the support and initiatives available to staff to enable them to travel more sustainably were run in 2014/15. Cycle to work salary sacrifice road shows were held at the main council offices throughout the year and a selection of events were held to promote National Bike Week.

## National Bike Week

Caerphilly County Borough Council staff got on their bikes to celebrate National Bike Week 2014. The annual event took place between Saturday 14 and Sunday 22 June and saw staff ditch the car in favour of a healthier mode of transport.

We encouraged staff to swap their daily drive to work for a more leisurely bike ride, improving their fitness, reducing petrol costs and lowering their impact on the environment at the same time. A number of lunchtime bike rides were also arranged to demonstrate the fantastic cycle routes and country parks situated throughout the county borough which are perfect for a casual afternoon ride, or a more challenging adventure.

There was the chance for staff to give their family's bikes a check-up at a number of 'Dr Bike' sessions. An expert mechanic was on hand to perform safety checks, make minor repairs and recommend any major work required in order to ensure everybody was safe on the road.



The twenty-five staff that cycled to work also received a free breakfast or lunch. This was also run at Bedwas High School offering both staff and pupils a free breakfast for cycling to school.

A bike calculator was also promoted during the week to show people how much money they could save and how many calories they could burn by cycling to work.

## Cycle to Work Salary Sacrifice Scheme

The Cycle to Work Salary Sacrifice Scheme was re-launched in September 2014 with a new provider, Cyclescheme, and the work continues to encourage staff to cycle to work. The tax efficient scheme has been promoted to staff via pay slip flyers, all users email and promotional events held at the main council buildings during 2014/15. A total of 390 bikes have been purchased through the scheme since it started.

## Pontllanfraith Pool Bike Scheme

Pontllanfraith House has 15 pool bikes (7 mountain bikes, 3 hybrid bikes and 5 electric bikes) available for staff to use for leisure purposes during the lunchtime period and after work and to cycle to and from work. Staff can also use the pool bikes for work related journeys for distances within a 4-mile radius of their office, subject to manager's approval.

## Penallta House Pool Bike Scheme

Penallta House has 6 bikes (3 mountain bikes and 3 hybrid bikes) available for staff to use for leisure purposes during the lunchtime period and after work/ during weekends, and to cycle to and from work. Staff can also use the pool bikes for work related journeys for distances within a 4-mile radius of their office, subject to manager's approval. Lockers have also been installed at Penallta House to support staff cycling to and from work or during the lunchtime period.

## Mileage Allowance for Bikes

In order to promote the use of cycles in line with the council's health and wellbeing and sustainable development initiatives, a cycle mileage allowance can be claimed where employees use their own bike to undertake their duties. This rate is paid at the prevailing HMRC rate, which is currently 20p per mile.

## Pontllanfraith Staff Mountain Bike Club

A staff lunchtime mountain bike club has been established to encourage staff based at the Pontllanfraith council offices to improve their health and fitness. The mountain bike club meets regularly for a local cycle. Cycle routes vary to accommodate new and existing members.



## Carshare scheme

The SD & LE Team continues to promote the carshare scheme and associated walk budi and cycle budi schemes. A total of 42 dedicated car share spaces have been designated at the 6 main sites. To date 384 members of staff have registered on the car share scheme.

In order to help the council meet its sustainable development agenda, a car share mileage payment has been introduced for employee's car sharing with other CCBC employees. A payment of £0.05p per mile per passenger, up to the maximum of the seating capacity of the car will be paid for employees using their cars on council business.

## Green Autos Salary Sacrifice Scheme (GASS)

In line with its commitment of reducing CO<sub>2</sub> output from vehicles used on business mileage and in commuting to work, the council has established a Salary Sacrifice Car Scheme as part of a government sponsored initiative to provide a leasing arrangement for low emission cars. The Council believes this is a good way to support employees during these tough economic times and the scheme will also help reduce carbon emissions in line with the authority's sustainability agenda.

This scheme enables staff to be provided with a new low emission car (CO<sub>2</sub> rating of 120g/km or below) of their choice, fully maintained and insured by the provider. Staff pay for the car under salary sacrifice arrangements through a monthly gross salary deduction, which results in a saving in tax, NI and pension contributions for any employee using the scheme. The Council also makes a contribution of £70 per month to each employee taking part where they are part of the LGPS.

The SD Team has worked with HR & Payroll to ensure that systems are in place to capture information on the CO<sub>2</sub> savings achieved by the scheme

During 2014/15, 116 cars were delivered with a further 46 awaiting delivery. This gives a total of 303 cars delivered since the scheme began. They cover a wide range of manufacturers. The CO<sub>2</sub> emissions for the vehicles being replaced by the lease cars has resulted in an average saving of 35%. The best individual saving is 62%.

## Pedometer Challenge

The SD Team worked with Let's Walk Cymru to utilise the Let's Walk Cymru Pedometer Challenge Wales website, for the CCBC Pedometer Challenge, which is free for any organisation or individual in Wales to use as part of their own pedometer challenge.

The CCBC Pedometer Challenge was held over 4 weeks from February 2nd to 28th 2015, catering for all CCBC employees.

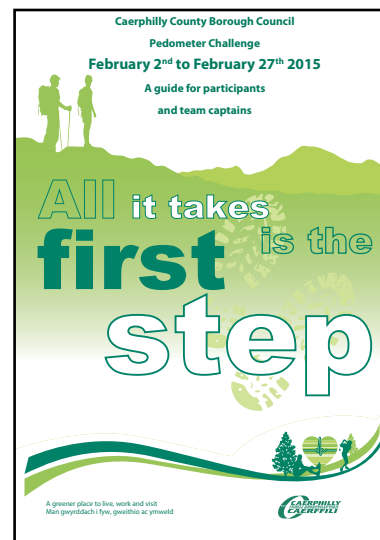
### The aims of the challenge were:

- To increase participation in walking
- Educate staff on how many steps they currently undertake on a daily basis
- Promote physical activity and encourage people to be more active, to improve their health and well-being

- Promote the recommended daily steps for an average healthy person, which is 10,000 steps a day, as recommended by the British Heart Foundation

The challenge was a huge success attracting 45 teams. Teams consisted of between 1 and 25 people, with a total of 338 people participating in the challenge.

As well as promoting walking, staff were also encouraged to participate in other forms of exercise, including running, aerobics, cycling, tennis, gardening and housework. To support this the estimated equivalent steps for a variety of activities were included in the pedometer challenge user guide.



The challenge highlighted some key facts including:

- The total distance walked by participants during the four weeks of the challenge was 27,225 miles, just over one time around the world.
- The majority of participants do less than the recommended 10,000 steps per day.
- Members of the winning team walked an average of 1,214 miles over the four weeks of the challenge.
- The top individual of the challenge walked 148 miles over the four weeks of the challenge.

Following the success of the fourth CCBC Pedometer Challenge the aim is for the SD Team to run an annual challenge to continue to raise awareness and understanding of the health benefits associated with walking as well as exercise in general to staff.

## Cycle Maps Project

A strategic cycle map has been developed as a partnership project with Sustrans to help promote sustainable travel within the Caerphilly County Borough.



The project involved producing a user-friendly map highlighting details of the cycle routes across the county borough. This includes a plan of routes that will give those living, working and visiting the county borough details of routes they can access for walking and cycling, as well as to link to other facilities.

The map will help encourage more journeys to be made by walking & cycling, thereby helping reduce car use in & around the Caerphilly County Borough.

The map has been designed so it can be downloaded and printed directly from the website, with approximately 10,000 being printed to be distributed to residents and visitors as and when required. The tourism section has supported the cycle map project, printing additional maps to distribute to residents and visitors from venues within the county borough.

## Supporting Services

A key element of the work of the SD & LE Team is to support individual services within the Authority to address sustainability issues. In 2014/15 specific projects were undertaken with five services on sustainable development looking at their individual service areas and how they could influence others. Some examples of this work are outlined below.

## Planning

The SD & LE Team is based within the Authority's Regeneration and Planning Division. It has close links with the Planning Teams and also provides support and advice to local people making planning applications to enable them to make their developments more sustainable.

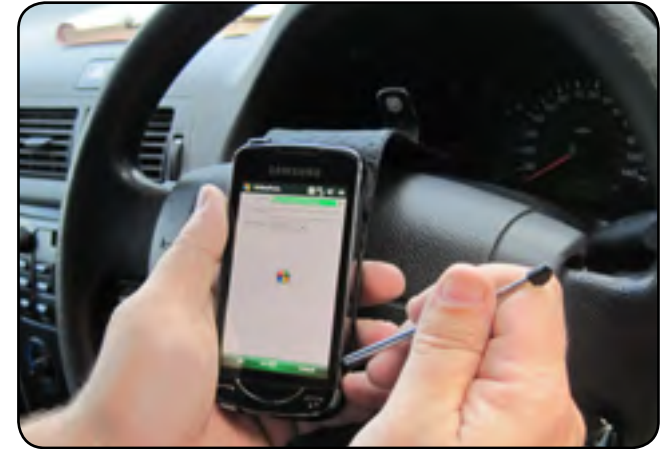
## Review of the Local Development Plan (LDP)

Caerphilly County Borough Council was the first Council in Wales to adopt an LDP in November 2010. The LDP identifies where new developments such as housing, employment, community facilities, and roads, will go. It provides a framework for local decision-making and brings together both development and conservation interests to ensure that any changes in the use of land are coherent and provides maximum benefits to the community. The SD & LE Team was heavily involved in the process, in particular contributing to the Sustainability Appraisal (SA) and Strategic Environmental Assessment (SEA) of the plan. The Team Leader was also a member of the high level LDP Focus Group.

The Annual Monitoring Report undertaken in 2013 identified that due to the change in the economic climate the number of houses being constructed in Caerphilly had declined, and thus general housing

targets are not being met and Affordable Housing targets were not being achieved. Further to this, the 5-year land supply that is required is not being attained and the supply currently stands at 3.5 years.

On this basis, it was agreed that a review of the LDP would be undertaken. The SD & LE Team has again been heavily involved in the SA/SEA work and contributed to the LDP Focus Group.



## ICT Services

The SD & LE Team continues to work closely with ICT Services, the Energy Management Team and the Carbon Reduction Group on ICT related initiatives.

ICT currently represents about 2% of CCBC's total CO<sub>2</sub> emissions. Within that 2%, 39% can be attributed to PCs and monitors, 23% to servers and

cooling, 15% to fixed-line telecom, 9% to mobile telecom, 7% to LAN and office telecom, and 6% to printers.

### Multi Function Printers

To date 270 Multi-Function Printers (MFPs) have been deployed across the Authority.

An average of 330,000 sides of paper were printed per week, 73% in mono and 27% in colour. The duplex rate of 60% has saved just over 25 million pages (equivalent to over 3,000 trees or 126 tonnes of paper) since MFPs were introduced in 2008. This equates to approximately 90,000 pages per week at present. The centralisation of paper and toner processes has led to a reduction in ordering and invoicing for the Authority and a reduction in photocopier leases and contract management.

These changes have ensured a huge reduction in the amount of transport needed to deliver printing consumables to this Authority.

The ICT Team had been working closely with Welsh Government's (WG) Chief Information Officers Team on testing out a revolutionary toner saving software product called "PretonSaver" and drafting a print strategy report for the public sector in

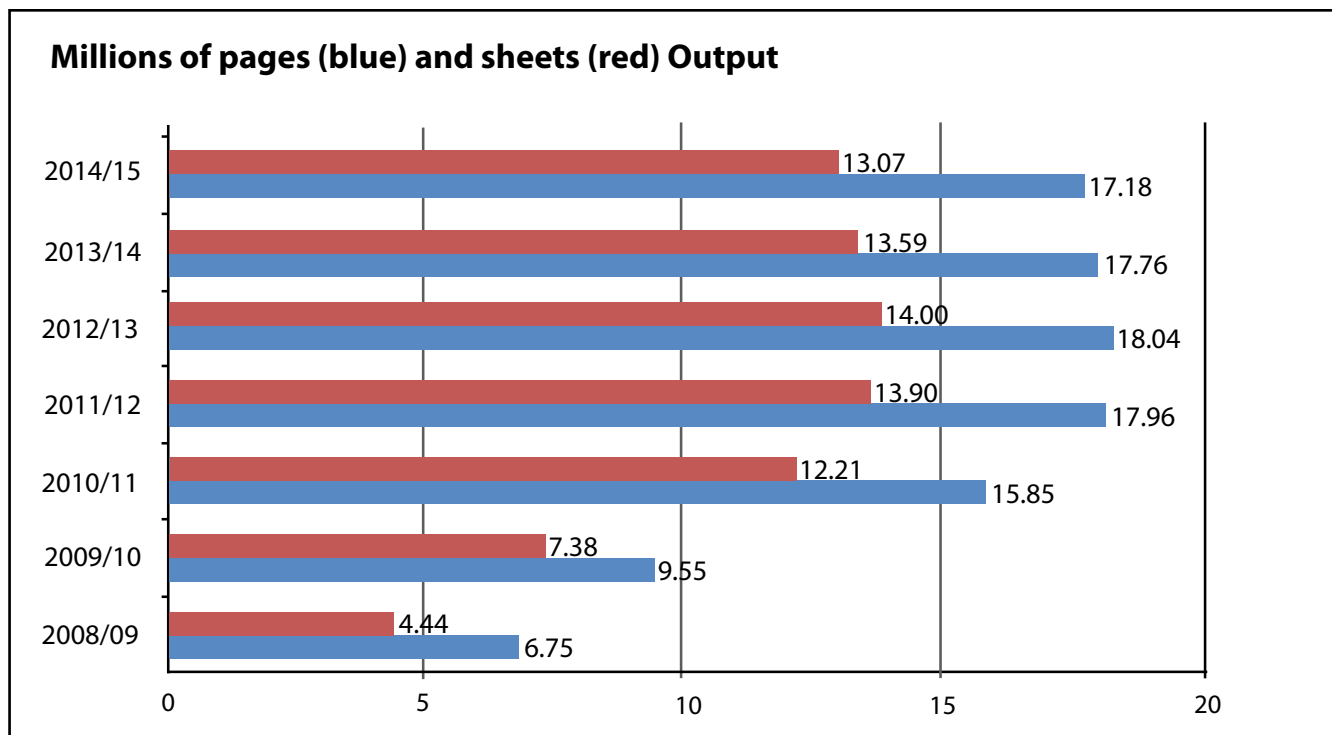
Wales. Following visits to several public sector organisations, Officers from WG had been highly impressed with the level of management and analysis of data that CCBC had developed as part of its print strategy.

The ICT Team are constantly looking at more efficient, sustainable practices and working with Procurement Services to reduce contract prices on printing consumables.

### The re-use and secure disposal of ICT equipment

ICT Services still ensure re-use of equipment that is no longer required but is still serviceable.

Corporate PCs that are replaced as part of the PC Replacement Programme are donated back into CCBC Schools. Corporate PC donations to schools are raising the technology levels of equipment, which are more power efficient.



PCs and Monitors that are not reusable are disposed of using ECO Systems IT Disposals, a third party supplier accredited to the highest disposal and security standards, as part of the WEEE Legislation.

### ICT equipment disposed in 2014/15

Base Unit	1534
Laptop	219
Monitor	61
Printer	76

### Remote Control and Desktop Support to reduce travelling

ICT Services continue to utilise Desktop Remote Control Software to assist with user's helpdesk calls. This allows the engineer to take control of a user's mouse and keyboard as if they are actually sat with the user. This has achieved a dramatic reduction in travelling and fuel costs. Our engineers are also allocated to zones, split North, South, East and West, which further reduces the need to travel large distances.

The ICT Services Engineers have also introduced a mobile application and new phones which allow them to pick up and resolve calls during the working day. This should also reduce travelling and improve performance.



### IGEL Thin Clients and PCs

The Authority is moving from PCs to IGel thin clients, where applicable, to reduce the support costs and also the power consumption. With this new technology the devices run on approximately 12 watts of electricity rather than the 50-60 watts used by a standard PC.

The intention is to move to approximately 2000 IGels and 1000 PCs and this will dramatically reduce the power consumption of the Authority.

Work will continue to ensure efficient power schemes are used on the PCs and Multi-Function printers, and that they are shut down every night to ensure maximum savings on power.

### CRT Replacements with Flat Panel Monitors in Schools

We are working with the Energy Team to review the current status of CRT monitors compared to TFT monitors in schools. There is potential to save approximately 60% of the electricity used by the device by swapping the technology.

There are approximately 10,000 monitors in schools so the potential savings could be large.

The Salix finance scheme is being used to fund these replacement programmes. See 'Invest to save', page 19 for further information.

### CRT Replacements in schools

	Disposed	Donated
Base Unit	413	58
Laptop	225	56
Monitor	386	35
Printer	163	2

### Procurement Services

Procurement Services are constantly striving to embed sustainability into their procurement processes and working practises. This includes

incorporating their Sustainability Policy in tender documentation and undertaking Sustainability Risk Assessments (SRA) at the initial stages of all appropriate procurement processes.

The inclusion of Community Benefits (or social requirements) in public sector Procurement is widely recognised as a means of ensuring that wider social and economic issues are taken into account when undertaking procurement exercises. As such, Welsh Government (WG) has included Community Benefits in its Procurement Policy Statement, aspiring to ensure that all those involved in spending public money get the maximum value for every pound spent.



The Council has adopted the WG Procurement Policy and most notably has produced a Caerphilly CBC specific 'Community Benefits Guide'. The guide

demonstrates the value of including Community Benefit initiatives within appropriate projects and without doubt assists the Council with achieving the following objectives:-

- Social & Economic Regeneration;
- Delivery of wider local community and social benefits; &
- Delivery of local and national sustainable development strategies.

The Council spends in the region of £170 million with third parties for goods, works and services and therefore considers that elements of this third party spend will afford an ideal opportunity for the Council together with contractors to enhance employment prospects and skills through the recruitment of local people, training and retention of "long-term" economically inactive people.

Contractors will be expected to work with representatives of the Council to maximise the potential of any Community Benefits that can be delivered through procurement processes and this will include (amongst other initiatives):

- Ensure that social and environmental matters detailed within the procurement documentation, are fully delivered;

- Jobs, training and skills opportunities (through Targeted Recruitment and Training) for local people;
- Maximising supply chain opportunities for SMEs: It is envisaged that successful contractors will work with the representatives of the Council to open up opportunities for SMEs, including social enterprises, to bid for 2nd and 3rd tier supply chain opportunities as they arising. It is expected that this will include advertising sub-contracting opportunities on Sell2Wales;
- Secure other positive outcomes that would benefit the community they operate in, with for example, working with local schools and colleges in providing work experience/work placements; and
- Contributing to community regeneration schemes throughout the county borough.

The Procurement team endeavours to keep up to date on various initiatives linked to Community Benefits and Sustainability. Officers attend various workshops and events in order to gain an understanding on latest developments. This can be demonstrated by attendance at recent events

such as the CIPS Future Generation Bill – Impact on Procurement and Welsh Government’s SRA training course.

To demonstrate the professionalism and commitment of the procurement function, the team recently achieved the Outstanding Contribution Award at the Welsh National Procurement Awards 2015. The team were praised highly for their hard work and received excellent feedback from the judges: “The examples of best practice demonstrated by ‘Team Caerphilly’ could be lifted into any procurement organisation to help ‘raise the bar’ and elevate procurement from the back office to the top table for decision making”.

## Carbon Reduction Strategy

The SD & LE Team works closely with the Energy & Water Team, and the Corporate Carbon Management Group to promote energy reduction initiatives and to install renewable energy systems. The Authority, working with the Carbon Trust, developed a long-term carbon reduction strategy in 2009. The ambitious but achievable target of a 45% reduction in CO<sub>2</sub> emissions by 2019 was agreed. It is anticipated that this target will be met by a mixture of:

- good housekeeping (10%)
- invest to save energy efficiency projects (20%)
- good design and asset management (10%)
- renewable energy (5%)

The authority’s energy management team, over the last decade, has instigated and registered impressive carbon and energy savings. This has resulted in annual carbon emissions being 2,621 tonnes lower than where they would otherwise have been.

## Good Housekeeping

The authority is seeking to raise awareness and provide training on good practice methods, such as switching off equipment after use, heating/cooling controls, and ensuring there are proper time settings on controls. These are no-cost and low-cost approaches, which result in energy savings.

This element involves behaviour change, ensuring staff are aware that their actions contribute to carbon emissions and encouraging them to turn off lights, computers, or other equipment. These are simple changes that can be made immediately. It is supported by having good benchmarks and data for all buildings.

There have been awareness-training events to school head teachers, caretakers and governors in 2014/15.

## Invest to save

The Authority is actively pursuing energy savings that can be achieved by installing energy saving technology such as insulation to prevent heat loss and control equipment such as movement detectors on lighting or voltage optimisation equipment.

Caerphilly aims to change street light lamps from 90 watt Sods to a more energy efficient format called Light Emitting Diodes (LED’s) which run at 19 watts. This will result in significant carbon reductions. Other standard technologies installed include Building Energy Management Systems, insulation, lighting upgrades and controls on equipment. Caerphilly CBC has a proven track record with this approach and compare favourably against other public sector organisations across the UK.

The Authority has been utilising the Salix invest to save scheme since Sept 2004. Salix provide £200k government funding and CCBC has provided £500k. This funding mechanism is used as a loan system across all non-domestic properties to implement energy efficient technologies. This scheme has saved 2,621 annual tonnes of carbon off its current consumption levels. This has also provided lifetime savings of £4.5 million. Savings generated by the scheme are then invested into new projects. Since the programme began over 220 projects have been

implemented using this funding. In 2014/15 this has included the replacement of the oil boiler at Ty Clyd with a gas boiler.

## Design and Asset management

The Authority is actively managing its assets to reduce energy use and costs. A programme of replacing old inefficient buildings with new buildings is ongoing.

Choosing the correct buildings to retain or dispose of can have a significant bearing on carbon emissions and constructing energy efficient buildings, which generate less carbon than the buildings being replaced, also makes a significant contribution.

Under occupation of buildings results in increased carbon, this is highlighted where schools heat the whole school for one room worth of community evening class.

The Authority's new schools have many energy efficient properties, including up rated insulation levels beyond building regulation requirements. They also include energy efficient lighting and controls, and sophisticated Building Energy Management Systems.



## Renewable technology

There is currently no budget for renewable technology. The Authority's approach is to implement good housekeeping, invest to save and asset management before looking to incorporate renewable technology. The authority has however, installed some renewables already, and is proposing to install a photovoltaic system on the Islwyn Indoor Bowls Centre.

It is also proposed to install a PV system in the region of 72kW at the planned Islwyn West Comprehensive School in Oakdale. This would provide carbon savings in the region of 34 tonnes per year.

## Corporate Improvement Objective

The Authority has included to "reduce our carbon footprint", one of its 5 Improvement Objectives for 2015/16. The Improvement Objective is structured on the 4 headings in the Carbon Reduction Strategy

## Housing

Housing accounts for more than a quarter of energy use and carbon dioxide emissions in the UK. The rising cost of energy has resulted in an increase in Caerphilly residents being driven into fuel poverty. Working with Housing Services, housing associations and residents to address energy issues was identified as a priority for the SD & LE Team in 2013/14 and has continued into 2014-15

The Authority's Housing Services have an on-going programme involving retrofitting homes with innovative measures including, external wall insulation. They also have a programme replacing old boilers with new condensing versions.

In 2012 Council tenants voted to stay with the Council. As a result a programme of work has been put in place to achieve the Welsh Housing Quality Standard for our council homes by 2019/20

Work is ongoing to actively seek to secure funding to enable us to continue to undertake energy efficiency improvements to properties in the county borough such as working with the Heads of the Valleys programme to address homes off the mains gas network.

### Arbed Programme.

Arbed is the Welsh Government's Strategic Energy Performance Investment Programme. It was introduced in 2009 to bring social, environmental and economical benefits to Wales and co-ordinate investment into the energy performance of Welsh homes.

In previous years the SD & LE Team contributed to the successful bids for Arbed projects at Fochriw and Hollybush. Recently Caerphilly CBC has also been successful in a bid for Phillipstown, New Tredegar for the Arbed year 3 programme. Once again the works are being project managed and delivered by Melin Homes the appointed management agent for the Arbed programme in South Wales.

Melin anticipates providing measures to approximately 400 homes within Phillipstown. External wall insulation is being applied to nearly 300 homes, and other energy efficiency measures e.g. loft insulation, heating upgrades or fuel

switching and voltage optimisers) will be provided to further properties.

Within the community Melin Homes identified a number of community projects which included

- Funding for Christmas meals for community groups and the youth club.
- Providing EWI at no cost to the community centre.
- Contacting the local school in order to work with them in various ECO, behaviour and education projects.

The project is due for completion in June 2015.



### Cyd Cymru

Cyd Cymru is a collective energy switching scheme developed to offer people in Wales an opportunity to save money by coming together to buy fuel "in bulk". The scheme has been developed by Cardiff Council and the Vale of Glamorgan Council, with support from the Welsh Government's "Regional Collaboration Fund".

It was developed in the Autumn of 2013 and two switches have taken place between January and March 2014. 6,800 households across Wales registered. Over 1,500 households switched saving an average of £185 per household.

The scheme is being delivered in partnership with the Energy Saving Trust Wales. In September 2013, a tender for a switching agent was run on Sell2Wales and the winning bidder was the 'energy helpline'. This contract is currently in place until March 2015.



Organisations wishing to get involved in the scheme can do so by signing a Charter, which includes the following pledges:

- Promote collective energy efficiency switching through Cyd Cymru
- Take action to help alleviate fuel poverty which currently affects 30% of Welsh households
- Help households to improve their energy use and increase their knowledge of how to save energy in the home
- Promote the scheme via local press and media, partner networks and engagement events to local residents to encourage registration
- Share local marketing plans (or list of planned activity) with the Cyd Cymru project team
- Share the proposals of the community fund allocated to the council with a locally agreed charity

For each household that switches supplier a fee is paid by the energy provider into a community fund. This fund is redistributed to local authorities across Wales based on the number of fuel switches in each area; this fund should be donated to local charities.

A further report will be presented to Cabinet following the end of the financial year to determine which local charities these funds are to be donated to.

## Climate Change Adaptation Report

The Climate Change Act 2008 gave Welsh Ministers the power to issue guidance on climate change impacts and adaptation. It also gave them the power to issue a direction requesting bodies with public functions to prepare an adaptation report. Local authorities are included as 'reporting authorities' as are the Health Boards, Fire Services and others.

In January 2012 the Minister for Environment & Sustainable Development published new statutory guidance, setting out what is required of us. The guidance is in 5 parts.

## Part 1: Starting

Sets out what is meant by 'preparing for a changing climate', and showing why it's important and worthwhile. It highlights some linkages with other work, for example with sustainable development, and suggests what good preparation might look like. It also involves learning about how the climate has already changed, how an organisation has been affected by weather in the past, and what we are already doing that counts as preparing for climate change.

## Part 2: Investigating

This involves refining the climate change impacts identified in Part 1, and identifying levels of sensitivity and adaptive capacity. It also includes a climate change risk assessment that explores the likelihood and consequence of each impact and provides your organisation with a list of prioritised impacts to develop actions for in Part 3.

## Part 3: Planning

This stage leads to an adaptation plan using information generated by previous investigations carried out in Part 2. It includes setting aims and objectives, identifying and prioritising adaptation options, and establishing baseline data and indicators, which help with monitoring and reviewing in Part 5.

## Part 4: Implementing

Part 4 discusses implementation of the adaptation plan produced in Part 3. It also addresses the need to build the adaptive capacity of the organisation and partners through training and communication, as well as delivering and managing `adaptation actions.



## Part 5. Reviewing

The principal goal of Part 5 is to determine whether the aims and objectives set out in your adaptation plan are being achieved. Reviewing allows for new climate information and any lessons learned to be captured and fed into the process, which should be seen as ongoing.

The guidance recommends the development of a Local Climate Impacts Profile (LCLIP). An LCLIP is one of a suite of tools created by UKCIP to help organisations adapt to climate change.

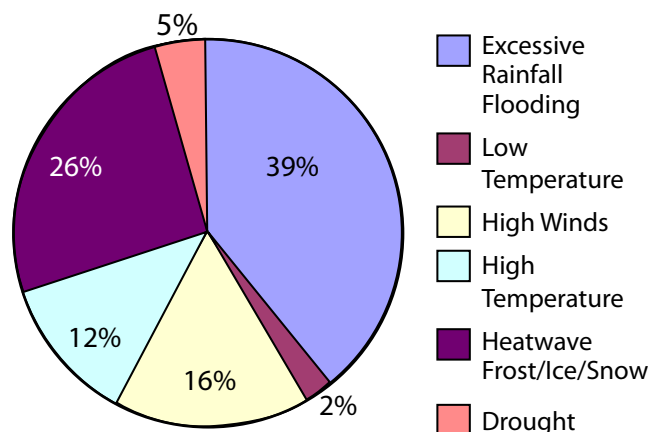
The SD & LE Team began the process of producing an LCLIP for Caerphilly County Borough by developing a database of extreme weather events between 2003 and 2013. This was collated by reviewing local media reports. The next stage was to verify the finding through interviews with key stakeholders.

The study identified 89 events of severe weather:

- 35 excessive rainfall/flooding events
- 23 frost/ice/snow events
- 14 storm/high wind events
- 11 Events of high temperatures/heatwave

- 4 Events of drought
- 2 Events of low temperatures/cold spells

Proportion of Weather Types by Media Source



Meetings were undertaken with 43 senior officers covering each of the 18 Service within the Authority. One hundred and twenty eight impacts were identified, of which 33 were rated as a high priority for further assessment.

The interviews and follow up work was compiled into individual reports for each Service which identified the main impacts and implications of

extreme weather events for that Service. All of these reports have been completed in draft and are being agreed with the relevant service area. Once agreed these Service reports will then contribute to the overall Local Climate Impact Profile (LCLIP) report which will provide a picture across the whole Authority.

Across the Authority existing systems are in place which compliment and enable adaptation work. These systems include Business Continuity, Emergency Planning, Corporate Risk Assessment, as well as the individual Service Plans.



	All weather	Excessive rainfall	Frost Ice Snow	Storm high winds	High temperature	Total
Total impacts identified	2	43	32	21	30	128
Rated as high priority	0	13	4	4	12	33

The completed work identified that there is a good understanding of climate change issues across the Authority. Services are aware that the climate is changing, and are considering and/or planning to adapt to the changes they are seeing.

The study also identified that the Authority is subject to numerous changes being driven by a combination of the current financial climate and new legislation. These are driving changes at a quicker rate than the natural adaptation of the organisation to climate change. Many of the potential changes also provide an opportunity to make the organisation more resilient to climate change. The rationalisation of buildings, changes to HR policies to enable more flexible or home working all have the potential to enable us to deal better with severe weather events. Climate change adaptation issues are being factored into the overall change process that the Authority is currently going through.

The completion and approval of the LCLIP will mean that Part 1 of the statutory guidance will be complete. The next step, set out in Part 2, is for those impacts identified as being high priority, to go forward for further investigation, vulnerability assessment and risk assessment. This work will commence when the LCLIP report has been agreed and approved.

## Groundwork

The SD & LE Team continues to have close links with Groundwork, with the Team Leader for SD & LE acting as an advisor to the Groundwork Board. Support has been provided in 2014/15 to improve links between Groundwork and Services within the Authority, and to promote their work.

During 2014/15 Groundwork Wales merged with Groundwork Caerphilly. The new trust called Groundwork Wales has a remit to operate across South Wales and is based in Groundwork Caerphilly's offices.



# Education for Sustainable Development & Global Citizenship



# Education for Sustainable Development & Global Citizenship

Education for sustainable development (ESD) has been a priority within the Authority since October 2004, when a dedicated ESD Officer was appointed to drive forward the agenda in the county borough. Embedding an understanding of sustainable development within schools and young people is seen as a vital element of achieving a sustainable county borough.

Over the years the role has been expanded to support other services including the youth service, adult education and more recently the early years sector.

## Education for Sustainable Development & Global Citizenship Communication

### School Communication

Education for Sustainable Development & Global Citizenship (ESDGC) support, communication and delivery has been communicated across the county borough through the Green Links e-newsletter, the ESDGC Practitioner network, education e-bulletins and school updates. The Sustainable Caerphilly website has a specific section providing on-line information and resources for schools, which is updated regularly.

Work has been undertaken to ensure that strong links were made with principal advisors within

Learning, Education and Inclusion to raise awareness and understanding of ESDGC and the work currently being undertaken in the county borough.



### Youth Service

Work is on-going to support the youth service to raise awareness and understanding of ESDGC and provide guidance to incorporate ESDGC into the youth work curriculum. Work undertaken to date includes:

- Developed a youth ESDGC Toolkit to support youth workers incorporating ESDGC into the youth work programme. This is being trialled with a number of youth groups in the Caerphilly County Borough, with two groups achieving the bronze award and one group achieving the silver award.

- ESDGC has been incorporated into all aspects of the youth service through their comprehensive ESDGC Action Plan.
- ESDGC web pages developed on the new Sustainable Caerphilly website for the youth sector.
- ESDGC training provided for youth workers on the ESDGC Youth Award Scheme as part of the Youth Service Training Week.
- Supporting youth groups working on the ESDGC Youth Award Scheme.
- Supported the Youth Service Staff Conference to promote the ESDGC youth award scheme and raise awareness of sustainable activities available for youth clubs to participate in.
- Developed ESDGC Youth Award Scheme

### ESDGC Youth Award Scheme

The ESDGC Youth Award Scheme has been developed to support youth groups working on environmental and sustainable projects as part of the youth work curriculum.

The ESDGC Award Scheme, the first of its kind in Wales, was developed as a partnership project between Caerphilly CBC and Bridgend CBC Sustainable Development teams and youth services in 2012. It was developed using features from other sustainable award schemes to support youth groups delivering ESDGC action as part of the Estyn inspection process.

There are three levels to the award (bronze leaf, silver twig and gold tree), which is suitable for youth groups of any size. It is expected that each award level will take approximately 12 months to complete.

The ESDGC Youth Award Scheme was launched in February 2012 at Penallta House to promote the scheme to youth clubs and other organisations and was trailed with five youth clubs within the Caerphilly county borough over an 18-month period.

Following the success of the trial, the award scheme will be rolled out to all youth clubs in the Caerphilly County Borough during 2015.

## Adult Education

Work is on-going to support adult education to raise awareness and understanding of ESDGC to adult education centre managers and tutors. Work undertaken to date includes:

- An adult community learning ESDGC toolkit, to support tutors incorporating ESDGC into their curriculum areas.
- ESDGC web pages developed on the new Sustainable Caerphilly website for adult community learning.

## Education for Sustainable Development & Global Citizenship work with Teachers

### Eco School Training

Eco School training was held for 29 primary and secondary school teachers over four sessions to support schools working on the eco schools programme. The training was promoted to schools in the Caerphilly County Borough, to support them progressing through the Eco Schools programme.

The training covered the whole Eco School process to provide additional support for schools holding the Bronze and Silver awards, working towards their Green flag award. The training also looked at the Platinum criteria for schools working towards their Platinum award. Follow up sessions were then held to monitor the progress of the schools going for their awards and to provide additional support if required.

## ESD & GC Resource Boxes

The twenty two resource boxes, developed to support schools and youth groups to incorporate ESDGC into the curriculum and youth work programmes have been reviewed and updated with additional lesson plans and curriculum links. The resource boxes contain books, CD's, artefacts, curriculum links and lesson plans and are loaned free to schools on a half term basis. The majority of the resource boxes have been booked every term, with schools and early years settings benefiting from the resources.

## ESDGC Education for Sustainable Development & Global Citizenship work with Governors

### ESDGC Governor Toolkit

An ESDGC Toolkit for school governors was developed in 2014 as a partnership project with Bridgend County Borough Council.

The toolkit was developed to provide guidance to governors to enable them to support their schools on ESDGC and to support the delivery of sustainable projects and work towards the various award schemes.

The toolkit contains information on ESDGC, sustainable award schemes, activities to run with governors, teachers and pupils and guidance on the Estyn inspection framework and the evidence required for ESDGC.

The toolkit was launched via governor networks and through the Governors Wales network and was presented to CCBC Governors in February 2014, prior to being circulated to all CCBC School Governors. It was also circulated to other ESD officers throughout Wales via the All Wales ESDGC Officers group.

The toolkit has been circulated again in 2015 to schools via the governor networks and Eco School coordinators to ensure all new school governors are aware of the support available to them on ESDGC.

## Education for Sustainable Development & Global Citizenship work with Pupils

### Early Years

### Eco Award Scheme for Early Years Settings

The Eco Early Years Award Scheme has been developed to support early years settings working on environmental and sustainable projects as part of the settings development plan. The emphasis is

on a commitment to environmental awareness and sustainable development within the setting and the wider community



There are 3 levels to the award scheme, bronze, silver and gold, with each award level taking approximately 12 months to complete. The award scheme has been designed to compliment the Healthy Early Years (HEY) Scheme. Settings who complete phase 3 of the HEY scheme, which contains the environment section, will also achieve the bronze Eco Early Years Award. The scheme also complements the Eco School award scheme to

ensure there is continuity when the children move from early years settings to a school setting.

Training has also been provided to support settings working towards the Eco Early Years Award Scheme, via group training sessions and individual support meetings.

### Healthy Early Years Award Scheme (Environment Section)

The Caerphilly Healthy Early Years (HEY) Scheme was initiated in 2008 to further support early years and childcare settings to promote the health and wellbeing of the whole setting community including children, parents/carers, and staff members. The ESD Officer supported the development of the Phase 3 Environment section.

The HEY Scheme runs for 3 years with one phase completed each year. The phases contain the following topic areas:

- Phase 1 (nutrition, oral health and play)
- Phase 2 (a safe stimulating environment, emotional health and wellbeing)
- Phase 3 (a health promoting workplace and the environment)

## Eco Schools Programme

### Eco Schools

We achieved 100% participation in March 2009 with 91 schools in the Caerphilly County Borough working towards the Eco Schools Programme. During 2014/15 schools have received support to help them achieve their bronze and silver eco school awards and progress through the programme to work towards the prestigious green flag awards and platinum awards.

By 31st March 2015, all 90 schools had achieved an Eco School award. Out of the 90 schools with an award, these are broken down into 7 Bronze, 19 silver and 64 Green Flag awards (including 10 second green flag awards and 22 third green flag awards). To date an amazing 71% of our schools hold the Eco School green flag award.



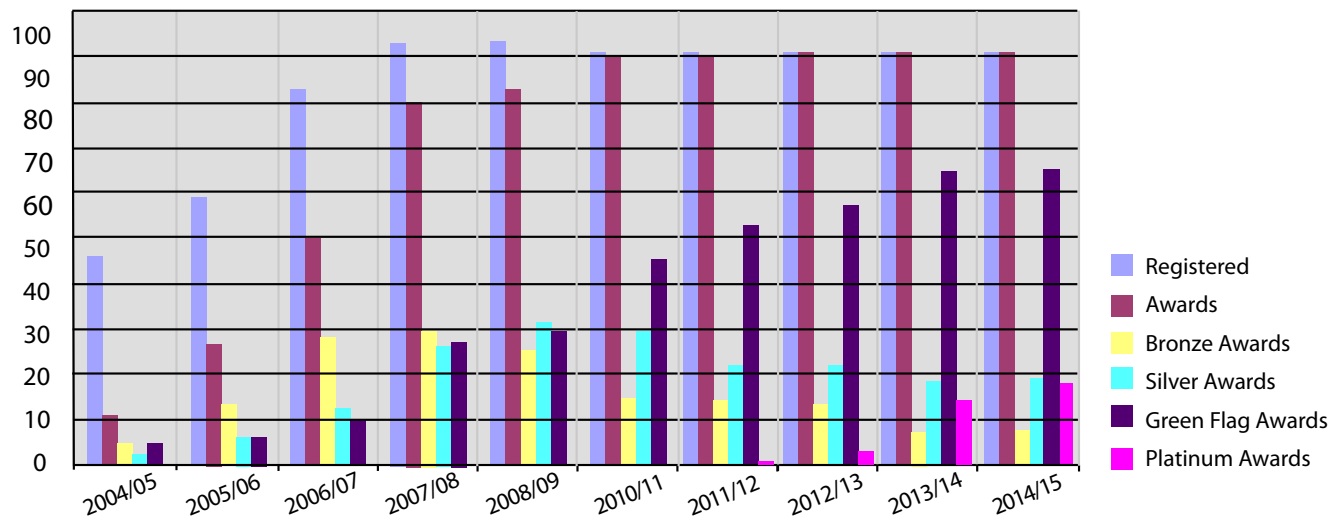
Sixteen schools in the county borough have also achieved the prestigious Eco School Platinum award (4th Green Flag) to date, these are:

- St Gwladys Bargoed School
- Llanfabon Infants School
- Ysgol Gynradd Gymraeg Caerffilli
- Cwrt Rawlin Primary School
- Bedwas High School
- Tyn Y Wern Primary School
- Plasyfelin Primary School
- Gilfach Fargoed Primary School
- Markham Primary School
- Llancaeath Junior School
- Cwmaber Junior School
- Blackwood Primary School

- Ynysddu Primary School
- Hendredenny Park Primary School
- Ty Isaf Infants School
- St Helens Primary School



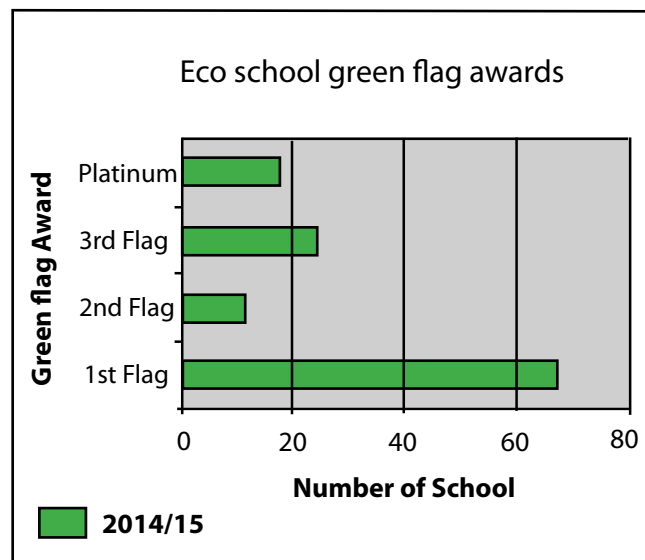
This is a huge achievement with only approximately 110 schools in Wales achieving the Platinum award.



## Eco School Support

Considerable support has been provided to primary and secondary schools in the county borough working towards the Eco School programme over the past year, including

- 45 individual school visits made to support schools working through the Eco School programme.
- 4 Eco School Green Flag assessments undertaken for neighbouring authorities.
- 9 Eco School Pre Green Flag assessments undertaken for schools in the Caerphilly County Borough.



- Supported 8 schools renewing their Eco School Green Flag status to ensure that they don't lose their Green Flag status, in line with the new Eco Schools Green Flag two year Renewal Policy.
- Eco School training was run over four sessions supporting 29 schools working towards the Eco School Green flag award and/or Platinum award. The training covered the whole Eco School process to provide additional support for schools holding the Bronze and Silver awards, working towards their Green flag award. The training also looked at the Platinum criteria for schools working towards their Platinum award. Follow up sessions were then held to monitor the progress of the schools going for their awards and to provide additional support if required.
- Promoted 'Green Grin O Meter' to schools. The Green Grin O Meter is a sustainable index designed to encourage children to calculate how sustainable they are. The index, aimed at children aged 8 to 12, will calculate their ecological footprint, health and happiness and provide tips on how to be more sustainable. The index allows children to monitor their sustainability, which supports the schools Eco School work programme.
- An Eco School Celebration event was held at Bedwas High School to congratulate the 64

schools for achieving the Eco School Green Flag award and/or Platinum award. 80 pupils attended the event along with teachers, headteachers, councillors and officers to celebrate their achievements and take part in a unique 'World of Ogs' workshop. Through storytelling and creative eco art and craft everyone had the chance to express their creativity by turning old clothes into unique and quirky Og characters.



## Fairtrade

### Fairtrade School Training

10 schools have participated in Fairtrade School training sessions, which have been run to support schools working towards achieving Fairtrade School Status. The training has been run over four twilight sessions giving teachers the opportunity to work through the scheme whilst attending the training.





Fairtrade resources have also been provided to the schools participating in the training to support them incorporating Fairtrade into the curriculum.

To date fourteen schools in Caerphilly County Borough has achieved Fairtrade School status, with the remaining schools working towards becoming a Fairtrade School as part of their Eco School programme.

### Fairtrade School Workshops

Five Fairtrade school workshops were held during 2014/15 to provide additional support to schools working towards the Fairtrade Schools Scheme as part of the Fairtrade School Training sessions. The

workshops, which looked at Fairtrade and Reduce, Reuse, Recycle were delivered to a range of primary school pupils.

Schools were also given Fairtrade Organic cotton bags to give out to local residents as part of their school Fairtrade coffee mornings to raise awareness of Fairtrade and sustainable development to the whole school and local community.

### Education for Sustainable Development & Global Citizenship Projects

#### Pride in Your Place Awards

The SD & LE Team once again supported the Pride in Your Place Awards, an initiative that acknowledges the endeavour, innovation and commitment of those who have helped to make our area cleaner, safer and greener and a better place to live and work. The award scheme is open to all residents, schools, businesses and community groups within the county borough.

The SD Team supported the development of the 2015 awards event and managed the Environmental Education category. This included promoting the award scheme to schools and youth groups, developing judging criteria, judging applications and supporting the awards evening.

### ESDGC – Literacy & Numeracy Framework Resources

The ESD Officer has worked with the All Wales ESD Officer Group to map ESDGC against the new Literacy and Numeracy Framework, to identify how these areas can be taught using ESDGC. ESDGC has been mapped against the Literacy and Numeracy Framework for year's 2, 6 and 9, with suggested activities, website links and resources identified for each of the elements within the framework. These documents will support schools embedding the requirements of the new Literacy and Numeracy Framework within their curriculum planning and include ESDGC as a theme for classroom teaching.

Printed versions of the documents have been sent to every school in Caerphilly County Borough.

### ESDGC/ Literacy & Numeracy Framework Training for Schools

Training has been provided to schools on 'delivering the new Literacy and Numeracy Framework using the Outdoors' and linking to ESDGC. The training, delivered by Natural Resources Wales, was run over two days, catering for 32 primary school teachers. The training sessions were very successful and popular with positive feedback from all participants. The teachers also had the opportunity to observe a

KS2 class undertaking some of the activities covered on the course, so that they could see the benefits of using the outdoors to deliver the new Literacy and Numeracy Framework.

Funding was secured from the CCBC CEQ fund to deliver the project, along with match funding support from Natural Resources Wales and Eco Schools Wales. The funding also covered the cost of the printing of the ESDGC/LNF Resources, which were distributed to every school in Caerphilly County Borough.

### Plant a Patch for Pollinators Project

Schools were encouraged to create a wildflower meadow patch within their school grounds for pollinators, such as bees. The project involved the schools having a free talk/workshop on pollinators and receiving free wildflower seeds for the creation of a wildflower patch.

The Plant a Patch for Pollinators project was a partnership project between CCBC and Pollen8 Cymru, with funding from the National Botanic Gardens and the CCBC CEQ fund.

Twenty-seven schools have received a free talk to date, with every school in the county borough receiving free seeds for a 1m<sup>2</sup> pollinator patch, with

some schools planting wild flower meadow's up to 10m<sup>2</sup>.

### Green Grins Index – School Sustainability Index

As part of the process of raising awareness and understanding of ESDGC to schools the SD team developed the Green Grin-o-meter, a children's version of the Caerphilly Sustainability Index to enable young people to calculate their own sustainability score in October 2010.



Both the English and Welsh version of the Green Grin-o-meter are being promoted to primary schools in the county borough.

The index, aimed at children aged 8 to 12, will calculate their ecological footprint, health and

happiness and provide tips on how to be more sustainable. The index allows children to monitor their sustainability, which supports the schools Eco School work programme.

Visit [www.greengrin.co.uk](http://www.greengrin.co.uk) or [www.cymraeg.greengrin.co.uk](http://www.cymraeg.greengrin.co.uk) to view the Green Grin o meter and find out how sustainable you are.

### Global Games Resource

A global games resource pack has been developed in partnership with Eco Schools Wales and the CCBC Healthy Schools Team. The resource includes 20 detailed games (including instructions on how to play each game) from various countries around the world, plus other relevant information on the country including cultural and environmental information.

The aim is that children can use the resource to play the games during playtime and after school while the teachers can use the games as part of the curriculum, linking to the other information provided as a starting point for specific projects.

The resource, launched in June 2014, is suitable for primary schools and the lower year groups of secondary schools.

## SSE (Swalec) School Project

A partnership project has been established with SSE (Swalec) to provide educational visits for schools six times a year. Participating schools visit the SSE site in Treforest for a 2-hour interactive tour with workshops to learn about renewable technology and energy efficiency. Three schools have undertaken visits to date, with a further six planned.

## Healthy Colleges Scheme

The ESD Officer has been supporting Ystrad Mynach College with their work on the Healthy Colleges Scheme. They are currently working on the 'environment' section of the scheme, which involves promoting sustainable development to staff and students and implementing projects to improve the college grounds and facilities.

## Children & Young People's Partnership

Supporting the Children and Young People's Partnership to develop the Local Participation Action Plan and deliver the actions detailed within the plan.

A review of the Participation Strategy for Children and Young People in 2012 identified areas to be developed over the following years as well as

recognising Participation as the underpinning priority for the Children and Young People's Plan 2011/14.

Following this review a focus group was established consisting of officers that work with or on behalf of children and young people to work together to develop the Local Participation Action Plan, as required by Welsh Government, ensuring that all relevant areas are included. The group meet twice yearly for review meetings and reporting purposes

The ESDGC work was presented to Welsh Government representatives during the October 2014 monitoring visit, to highlight the ESDGC work undertaken with the young people. Report cards and case studies have also been completed to feedback on ESDGC progress with schools and youth groups.

## Caerphilly Solar Schools Project – Phase 2

In partnership with United Welsh Housing Association an additional £71,000 was secured to continue to install solar photovoltaic panels on the remaining schools in the Heads of the Valley area.

As part of Phase 2 we installed solar PV systems on the following schools and education centre:

- Park Primary School
- Deri Primary School
- St Gwladys Bargoed
- Aberbargoed Primary School
- Gilfach Fargoed Primary School
- Phillipstown Primary School
- YG Gilfach Fargoed
- Aberbargoed Education Centre

The Solar Schools project supports the authority's work towards the Carbon Reduction Strategy by reducing the schools energy usage and carbon dioxide emissions as well as acting as a prominent reminder to each community of the urgent need to tackle climate change.



Remote monitoring equipment is fitted to all seventeen installations to allow the schools to monitor their data and use it as part of their curriculum work.

## Caerphilly Solar Schools Education Resource Pack

The Caerphilly Solar Schools Education Resource Pack, which was developed in 2011 as part of the Caerphilly Solar Schools Phase 1 project, is being promoted to schools to support their eco school activities and to help them incorporate renewable energy and energy efficiency into the curriculum. The resource pack has been distributed to every school in the county borough, with solar kits available for schools to borrow.

The education resource pack caters for primary and secondary schools, containing classroom and after school activities, lesson plans for each key stage, resources to support the activities and a list of useful websites and contacts throughout Wales.

## ESDGC Schools Network

The ESD Officer supports the ESDGC Schools Network, working to promote the take up and understanding of ESDGC in Caerphilly, Merthyr, Bridgend, RCT and the Vale of Glamorgan. Projects

undertaken in 2014/15 include governor training, Mapping ESDGC against the LNF Framework, global citizenship links for primary and secondary schools and investigating different methods to assess pupils understanding of ESDGC.

## ESD & GC Partnership Support

Support has been received from external partners to support various events run by the SD Team, including Groundwork Caerphilly, Keep Wales Tidy, Eco Schools Wales, Dwr Cymru Welsh Water and the Wales Fairtrade Forum.

## WAGE – Wales Alliance for Global Education

The Wales Alliance for Global Education group has been established to support Education for Sustainable Development & Global Citizenship in schools in Wales, and to advocate a future of global learning.

The group brings together members of Wales International Development Hub and providers who support schools on ESDGC, who respond collaboratively to issues and reports that could have an effect on ESDGC delivery.

The group have secured funding from the European DEEEP Project (building capacity of education), to support some of the activities planned between April and September 2015, detailed in the group's action plan, which include a national seminar and capacity building.

# Greener Caerphilly



# Greener Caerphilly

The Sustainable Development & Living Environment Team co-ordinated the Living Environment Partnership, which was one of the 4 thematic partnerships of Caerphilly's Community Strategy. In April 2013, the Caerphilly Local Service Board (LSB) and partners in the county borough approved "Caerphilly Delivers" – the LSB Single Integrated Plan (SIP) for the county borough.

Caerphilly Delivers, sets out a partnership vision for Caerphilly, of "sustainable communities, supported by actions that enhance the quality of life for all".

## This means people who:

- Are healthy, fulfilled and feel safe
- Are well qualified and skilled
- Are within a vibrant economy
- Live, work or visit in a greener living environment

To realise our long-term vision the strategy identified five key outcomes:

1. A Prosperous Caerphilly
2. A Safer Caerphilly
3. A Learning Caerphilly

## 4. A Healthier Caerphilly

## 5. A Greener Caerphilly

A key focus of the work of the SD & LE Team in 2014/15 has been to ensure the integration of sustainable development and living environment issues into the Single Integrated Plan for the county borough.

The "Greener Caerphilly" section was based on the priority environmental issues identified and consulted on by the Living Environment Partnership. The box on the right contains the summary of the aims and priority areas identified in the "Greener Caerphilly" section. Further work has been undertaken to ensure that SD and environmental issues are incorporated into the 4 other themes of the Single Integrated Plan.

A full copy of the document can be found at:

<http://your.caerphilly.gov.uk/communityplanning/content/single-plan>

## Greener Caerphilly

A Greener Caerphilly aims to:

- Safeguard and, where necessary, enhance the living environment in the Caerphilly County Borough for its own sake
- Secure quality of life for local people and visitors now and in the future.

Based on the findings from the Caerphilly Unified Needs Assessment, the Single Integrated Plan development days, and the work of the Living Environment Partnership, three priority areas for working towards a Greener Caerphilly have been identified; these are:

G1:

Improve local environmental quality

G2:

Reduce the causes and adapting to the effects of climate change

G3:

Maximise the use of the environment for health benefits



## PRIORITY G1: Improve local environmental quality

Caerphilly County Borough covers an area of 27,750 hectares, 80% of which has been identified as countryside (i.e. land outside settlement boundaries and used for agriculture, recreation and forestry). The majority of its settlements are located in the valleys of the rivers Ebbw, Sirhowy and Rhymney.

Within Priority G1, two areas were identified for action:

- 1) Fly-tipping
- 2) Biodiversity

### Fly-tipping

Fly-tipping is the illegal dumping of waste on to land. It can pollute the environment, be harmful to human health and spoil our enjoyment of our towns and countryside.



In the county borough there is a genuine multi-agency partnership approach to tackling fly-tipping. This is based on education programmes, including targeted work with key sectors, media, radio and bus advertising, as well as a strong approach to prosecuting those found to be responsible for fly-tipping. GPS mapping to identify and target hotspots for fly tipping is proving successful, as are targeted clean-up campaigns supported by educational and support programmes.

### Biodiversity

The biodiversity of the borough is declining and this reflects the losses being experienced in other parts of the UK and across the world. In Caerphilly there are 110 species listed in the Caerphilly Biodiversity Action Plan as being in need of conservation action, and an additional 87 species are listed in the Species of Principal Importance in Wales (Section 42 species). Of these species at least 5 have disappeared from the borough and have not been recorded for at least 10 years, and many other species have declined in their numbers and distribution. In order to provide an indication of the health of Caerphilly's biodiversity, 26 species have been selected as indicators of the state of Caerphilly's biodiversity and will be monitored annually.

The borough supports a range of sites designated for their wildlife value, including a recently designated National Nature Reserve, which is also a site of European importance, designated for its population of marsh fritillary butterflies and purple moorgrass habitat. In addition, there are 11 Sites of Special Scientific Interest (SSSI) designated for their national nature conservation or earth science importance, four Local Nature Reserves (LNRs) & 190 Sites of Importance for Nature Conservation (SINCs).

### Community Schemes Programme - Caerphilly Environment Quality Small Grants Fund 2014/15

Each year the Council makes a budget available for community orientated projects that maintain or enhance 'community assets'. This includes the type of work carried out by the Community Response Team such as the repair of seats, the replacement of vandalised street furniture and hard landscaping and other small items of maintenance work.

The SD & LE Team co-ordinates a programme of work to take forward small community focused projects, empowering local community groups, and at the same time adding to the sense of a well kept county borough. In 2014/15 the Community Scheme provided funding worth £12,431 to support 6 projects:

Project name	Total cost	Amount approved
Rural Skills Project	£3,862	£1,931
Delivering Real Improvements via the Literacy and Numeracy Framework	£4,000	£2,000
Go Wild! Pollinators Project	£4,000	£2,500
Healthy Rivers/River Schools	£27,000	£2,000
Access Caerphilly Volunteer Group	£3,000	£1,500
Managing Giant Hogweed	£8,000	£2,500
<b>Total</b>	<b>£49,862.00</b>	<b>£12,431.00</b>

## 1. Rural Skills Project

The Rural Skills Project was organised by one of the RDP Sustainable Energy Officers based in the SD & LE Team. It was initiated following an issue raised by RDP Agri Network members regarding a lack of rural skills training in the county borough. As a result of this the RDP Officers carried out a survey with the local rural community and a large number responded to see if they could be supported in training that would not only help maintain their site but also have the potential to assist them to diversify into contract work, particularly dry stone walling and hedgelaying.

Traditional skills such as dry stone walling, and hedgelaying have played an important role in

the distinctive and unique landscape that we see around us today. Unfortunately, the change in land management practices over the past century has resulted in many of these features being left neglected and falling into disrepair. Originally used for the purposes of stock control, the skills were once common practice. However, due to the introduction of cheaper and less labour intensive methods of stock control, the traditional forms of land management are now much rarer skills.

The aim of the project was to retain these vital local skills and to encourage local people to maintain, restore and upgrade the rural heritage of the borough. Several attendees indicated that the course could assist their farming businesses with the possibility of diversifying into contract work.



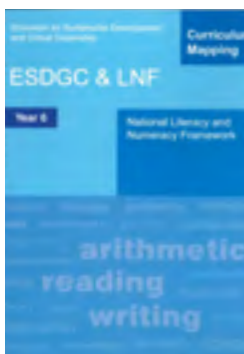
Six one-day taster sessions were held for both of the rural skills. During the dry stone wall taster sessions attendees were taught everything from dismantling, laying foundation stones, throughstones, buildingstone and filling and then laying the copestones on the very top. Approximately 10m of standard 'doubled' dry stone wall was completed over the six days. This is where two independent faces are separated by a core of much smaller stone. During the hedge laying taster sessions attendees were taught how to clear/prepare the hedge, cut and lay the pleachers, fix the stakes and bindings, how to correctly use and maintain hedge laying tools and the benefits of hedge laying for wildlife and landowners. There are many styles of hedge-laying throughout the UK. Here in Caerphilly County Borough the most commonly used is the Welsh Border style and it is this traditional hedge maintenance that was taught on the taster sessions.



## 2. Delivering Real Improvements via the Literacy and Numeracy Framework

This project was led by the Education for Sustainable Development Officer based in the SD & LE Team with the support and involvement of Natural Resources Wales, Caerphilly Countryside Service, and Eco Schools Wales as partner organisations.

The aim was to provide training for teachers and school staff to show them how to use and develop their school grounds and local community areas to help them deliver the new Literacy and Numeracy Framework, while linking to the outdoors, ESDGC and Eco Schools. With Welsh Government introducing the new Literacy and Numeracy Framework for all key stages, this is a key opportunity to encourage schools to engage in curriculum projects in the local community and to utilise their school grounds.



Sixty teachers attended the training sessions, six from secondary schools and fifty four from primary schools. The training sessions were split with:

- 32 teachers attending the training sessions at the Aberbargoed Education Centre, held on October 22nd 2015 and February 25th 2015, run by Natural Resources Wales
- 28 teachers attending the Eco School training sessions, held at the Welsh Water Education Centre in Cilfynydd, run by Eco Schools Wales

Teachers found the training session very useful, providing a range of activities and good quality resources. The training gave the teachers the confidence to run the outdoor activities covered, plus other outdoor activities in their own setting. The most useful elements of the day included practical activities, lesson ideas, linking to the LNF and seeing the children engage in the activities. Comments included:

- Excellent day full of lovely activities to take outdoors
- Enjoyable day. It was interesting to observe pupils carrying out the activities
- More awareness of carbon footprint and linking to LNF

- Lots of cross curricular lesson ideas/ activities  
Good to see how familiar activities can be adapted to incorporate literacy and numeracy
- The training highlighted that the school grounds is a fantastic resource that we should develop and use on a regular basis

## 3. Go Wild! Pollinators Project

The Go Wild! Pollinators Project 'Plant a Patch for Pollinators' was organised through the Caerphilly County Borough Council, Countryside and Landscape Service section. Project partners included CCBC Sustainable Development Team, Pollen8 Cymru and the National Botanic Gardens.

With Welsh Government introducing the new Pollinator Action Plan, it was a key opportunity to encourage schools to engage in curriculum projects to utilise and enhance their school grounds for pollinators.

All schools within Caerphilly County Borough were offered the opportunity to receive a free pollinator workshop and wildflower seed pack to create a wildflower patch for pollinators, such as bees and butterflies within their schools grounds. Twenty six schools got in touch asking for the workshop session, which was delivered by Pollen8 Cymru, and

wildflower seeds. All the other schools received wildflower seeds to create a pollinator patch. The wildflower patches ranged from 1m<sup>2</sup> to 10m<sup>2</sup>, depending on the school ground available. A guidance sheet was also created with instructions on how to prepare the patch for the seed and aftercare instructions.



Teachers found the workshop session very useful in providing a range of information on how to help pollinators. It also helped provide them with confidence to run outdoor activities on pollinators.

#### 4. Healthy Rivers/River Schools

The Healthy Rivers and Rivers Schools projects are partnership projects co-ordinated by Groundwork Caerphilly involving the South East Wales Rivers

Trust (SEWRT), Natural Resources Wales (NRW) and CCBC. The projects were established with the aim of removing the barriers to salmon migration up the River Sirhowy, engaging local people, and undertaking environmental improvements to the River Sirhowy to improve its Ecological Status under the Water Frame Work Directive (WFD).

Walkover surveys were undertaken for the whole length of the river. The surveys identified issues that were impacting on fish populations and other aspects of the ecology on the Sirhowy River. The results of these surveys confirmed the presence of barriers to migration, a key constraint on the Sirhowy reaching its full ecological status. It was identified that the removal or modification of these barriers would improve fish passage and would open up large sections of the upper catchment to migratory species.

#### Fleur de Lis weir and pipe

A Welsh Water sewer pipe crosses the Rhymney River at Fleur de Lis, The pipe is protected by a concrete weir and large boulders have been placed directly below the weir to prevent the falling water causing erosion to the river bed. The height of the weir is 750mm so is a significant barrier to upstream fish migration on the river.

Work was undertaken to allow salmon to pass by building a timber box pool on a flat concrete platform protruding from the weir approximately halfway. Healthy Rivers used timber sleepers mechanically fixed to the concrete platform to create a box pool. A gap was left to create a flow of water from the pool that would attract migrating fish. The box pool creates a deep pool that migrating fish can rest in and use to propel themselves over the remainder of the weir.

#### Nant Bargoed Culvert

At the confluence of the Nant Bargoed and Rhymney River there is a concrete box section culvert approximately 100meters long. The Nant Bargoed flows through this culvert under the Bargoed viaduct and road junction between Bridge Street, Station Road and Factory Road. The box section design of the culvert means that the water flows over a flat concrete bed therefore it is very shallow and fast flowing. There is a small weir at the downstream end of the culvert and a concrete sill that extends beyond the mouth of the tunnel. Any fish that is able to jump onto the concrete sill would be washed back immediately as the water is too fast and shallow for the fish to swim in.

The method of modification was to create a side channel over the sill and through the length of

the tunnel that would consistently hold a depth of water of 200mm and reduce the flow velocity. This was achieved by using timber sleepers to build a channel through the length of the tunnel. Within the channel a series of timber baffles were installed to reduce the velocity of the flow and to create rest pools. This fish pass allows migrating fish to be able to successfully swim through the tunnel.

## Nant Bargoed Weir

The weir on the Nant Bargoed was a major barrier to fish migration. The weir was approximately 1.5 meters high and therefore a very large unachievable jump for migrating fish. Healthy Rivers looked at options to either completely remove or partially remove the weir; however this was not a possibility as this would have destabilised the retaining wall and risked exposing a Welsh Water pipe further upstream.

Work was undertaken with NRW and SEWRT to employ a contractor to install three block stone pre barrages downstream of the weir. The pre barrage weirs have raised the water level below the original weir reducing its height by half. The fish must now make 4 smaller jumps to get over the pre barrages and weir rather than 1 large unachievable jump. A side channel was also created beside the weir to further help fish migration upstream. The side



channel was created on a section of the weir that had already been eroded away by the river.

Students from Coleg Y Cymoedd planted a variety of native trees along the access track that the contractors had to clear to get to the river. The students replaced the trees that were felled along the track with oaks, willow, hawthorn, blackthorn and beach.

The Nant Bargoed will be monitored in 2015 to assess if the fish passes installed on the weir and culvert are successful.

## Salmon in the Classroom

The Healthy Rivers Officer set up a salmon hatchery in the Groundwork Caerphilly classroom. South East Wales Rivers Trust provided some 100 salmon eggs and equipment. The hatchery consisted of a

fish tank, a cooling system to keep the water below 10°C and a filter to aerate the water and remove waste. Local primary schools were invited to the classroom to see the eggs and young salmon and to learn about the lifecycle of the salmon and issues that are affecting the River Sirhowy. Pupils from 7 local primary schools and 1 scout group visited the salmon hatchery. In total 500 children saw the young salmon and learnt about their life cycle.

The pupils that had been involved with the 'Salmon in the Classroom' project had the opportunity to release the young salmon that they had watched develop in to the river. The school pupils released the salmon at various locations along the Sirhowy in July.

The schools also had the opportunity to take part in some river schools activities. For example, children from Markham and Trelyn School visited their local rivers to measure the width, depth and flow of the river and to kick sample for river invertebrates.

The Salmon in the Classroom has proved to be inspirational, with the pupils continuing to do their own research, learning about salmon and making displays in their school.

[www.youtube.com/watch?v=oRQm3aXgm7U&safe=active](http://www.youtube.com/watch?v=oRQm3aXgm7U&safe=active)



## River Restoration Qualification

Healthy Rivers has been working in partnership with Agored Cymru, NRW and SEWRT to develop and deliver a River Restoration Qualification (Level 1). The course is offered to volunteers to develop their skills in river restoration so that they can make improvements to the south wales rivers in the future. This is a brand new qualification currently being run as a pilot to a small group of volunteers. Once the pilot is completed the course will be open for anyone to take part. The course is being run from the Groundwork offices, with 2 of the current volunteers living in Caerphilly County Borough.

## Overall success

The Healthy Rivers and River Schools projects have proved to be a huge success, and this was confirmed

with discovery of salmon nests north of Blackwood. This is the first time that this has occurred in over 100 years.

For the first time, in over 100 years, the whole length of the Sirhowy in Caerphilly County Borough is now navigable for salmon. This has resulted in the Ecological Status of the river being upgraded to "Good" for the first time since the classification was introduced.

The work has generated a large amount of media interest including from BBC Radio Wales who invited the Healthy Rivers Officer to talk about the programme on the radio.

## 5. Access Caerphilly Volunteer Group

The Council's Countryside and Landscape Service continues to manage, promote and maintain rights of way and country parks within the county borough. Work was undertaken throughout 2014/15 to maintain the network and to ensure that pathways were easily accessible. Maintenance of the network is carried out by a combination of Rights of Way Wardens, contractors and volunteers. In 2014/15, 78% of Rights of Way were classed as easy to use.

The Rights of Way section have carried out the following maintenance and improvement works in 2014/15:

- 25 km of clearance work throughout the borough
- 15 waymarking posts
- 1 km of new all weather surfacing
- 25 gates, 10 stiles and 5 flights of steps
- 1 new bridge and 5 bridge repairs
- 3 new tubular handrails



Funding for equipment and materials was provided through the Greener Caerphilly partnership to support the Rights of Way Volunteer programme. Training is provided to the volunteers in the use of small hand tools, surveying techniques and several have been First Aid trained.

Projects involving Rudry Volunteers, Islwyn Bramble Busters, Youth Offending Service and individual volunteers were undertaken. Work in 2014/15 by the Rights of Way Volunteers includes:

- 5km of clearance work on the PRow network, across the County Borough
- Installing 10 waymarking posts, including fingerposts
- Installing of access furniture, including 5x kissing gates, 10 stiles and a flight
- Surveying approximately 80 km of promoted (leafleted) walks in the borough. This included the popular Rhymney Valley Ridgeway Walk, Machen Forge Trail, Rhymney Riverside and the “Escape to...” series.

## 6. Managing Giant Hogweed

Managing Giant Hogweed is a project organised by CCBC Countryside and Landscape Services with Groundwork and neighbouring local authorities as partner organisations. It forms a continuation of a previous project awarded grant funding from CEQ funds last year.

The aim of the project was to utilise the use of volunteers trained in the control of invasive species. Members of local fishing clubs, local allotment groups and others interested in biodiversity were trained to apply herbicide and in the use of brush cutters, as methods for controlling invasive species and managing riparian habitats within Caerphilly County Borough. A particular focus for 2014/15 has been the River Sirhowy. Additional funding provided by the Partnership enabled extra work to be done and as part of this work a previously unidentified area containing over 300 Giant Hogweed plants was found and the plants sprayed.

Giant Hogweed can cause significant health problems for humans. The sap, when activated by UV light causes the skin to blister approximately 15-20 hours after original contact. Blistering can often re-occur for many years after initial contact.

Giant hogweed is a successful invasive plant as a result of its prolific seed bank and ability to disperse seeds easily by wind, water, or animal and also human influence. The plant only flowers once in its lifetime but is capable of producing thousands of seeds. It can also postpone flowering for up to twelve years. However, it can be controlled effectively by spraying and the treatment of the plants before flowering and fruit set occurs.

Surveys of invasive species have been undertaken and giant hogweed has been identified as a particular issue within the river catchment areas within the county borough. Giant hogweed is prevalent in the Ebbw catchment, with some occurrences in the Sirhowy catchment. In Newbridge alone approximately 200 plants have been identified, whereas there are currently no occurrences of this invasive species in the Rhymney catchment area.



## PRIORITY G2: Reduce the causes and adapt to the effects of climate change

Climate change is widely regarded as one of most important issues facing the world today. It is not simply an environmental problem - there will be major consequences for our society, economy and health. Our future quality of life depends on balanced environmental conditions, including stability of the climate. We are all affecting our climate by causing greenhouse gases to be released into the Earth's atmosphere.

**In 2014/15 under Priority G2, the work has focused on 4 topics:**

- 1. Ecological footprint**
- 2. Renewable energy**
- 3. Waste/recycling**
- 4. Eco Schools**



### Ecological footprint

An ecological footprint provides a calculation of resource use based on the materials used in everyday lives.

Through ongoing partnership work, the council has raised awareness of environmental and climate change issues, and encouraged residents of the borough to reduce their resource consumption, waste production and consequently their ecological footprint.

The Sustainable Development section of the Council's website has been rewritten. It continues to promote the use of the on-line tool, however a reduction in staff resources means that the programme of workshops and events has been reduced

The Caerphilly Sustainability Index can be found at: [www.sustainablecaerphilly.co.uk](http://www.sustainablecaerphilly.co.uk)

### Renewable energy

Generating energy, both heat and electricity, from fossil fuels releases green house gases, which contribute to global warming and climate change. Energy generated from renewable sources such as wind, water and the sun does not generate green

house gases and therefore does not contribute to climate change.

The generation of electricity and heat from renewable sources is largely driven by national incentives through the Feed in Tariff (FIT) and



Renewable Heat Incentive (RHI). Local advice is provided to individuals and businesses by a range of organisations including the Carbon Trust, Energy Saving Trust, Groundwork Caerphilly, housing associations and the Council.

### Renewable energy generation data

In 2014/15, 292 photovoltaic systems with a total capacity of 1.002 MW were registered, with Ofgem, for the Feed in Tariff (FIT) in Caerphilly.

The total capacity of renewable energy systems registered with Ofgem in Caerphilly at the 31st March 2015 was 6.645 MW. This was made up of 1,911 photovoltaic installations and 4 wind turbine installations.

Larger schemes are registered on the Department of Energy & Climate Change (DECC) system.

The partnership project between CCBC and Partnership for Renewable successfully installed 2 wind turbines on Oakdale industrial estate in 2013/14, with a combined generating capacity of 4 Megawatts (MW).

A solar farm was established by a private developer at Hendai Farm, Nelson with a capacity of 13.4 MW. This information when added to the Ofgem

data gives a total installed capacity in the county borough of 31.045MW

Amount Megawatts (MW) installed capacity of electricity generated from renewable sources registered for Feed In Tariff Caerphilly comparison with Wales

	2010/11	2011/12	2012/13	2013/14	2014/15
Caerphilly	0.099	2.075	1.595	0.874	2.002
Caerphilly cumulative total	0.099	2.174	3.769	4.643	6.645
Wales	4.529	51.984	33.416	23.513	10.725

Amount Megawatts (MW) installed capacity of electricity generated from renewable sources registered for Feed In Tariff with Ofgem and DECC

	Pre 2010	2010 - 2011	2011 - 2012	2012 - 2013	2013 - 2014	2014 - 2015
Caerphilly Ofgem registered		0.099	2.075	1.595	0.874	2.002
Caerphilly DECC registered	7.0	-	-	-	4.0	13.4
Caerphilly cumulative total Ofgem and DECC	7.0	7.099	9.174	10.769	15.643	31.045



## PRIORITY G3: Maximising the use of the environment for health benefits

With around 80% identified as countryside, the county borough is blessed with some of the most attractive landscapes and valuable environment in Wales. These are, however, next to pockets of some of the worst health in Wales. The aim of this element of a Greener Caerphilly is to maximise the use of the environment for health benefits to residents of the county borough.

Greener Caerphilly partners are working closely with health partners to maximise the health benefits to residents. The Creating an Active Caerphilly Plan brings together work in this area.

### Come Outside!

The Natural Resources Wales co-ordinated 'Come Outside!' programme inspires and enables community, youth and health officers to support less active people to become regularly involved in outdoor activity to enjoy the outdoors, and to experience the benefits, and value and care for the natural environment.

The Come Outside! Team are the catalyst that has brought network members together, to pool their resources and outdoor sites to enable people to get more physically active.

Through recreation, play, volunteering, outdoor learning/skills development and active travel, the Programme will help develop the skills of over 500 young people not in education, employment or training, to increase opportunities to re-enter education, access training and pursue employment opportunities. The programme will also support over 1,300 people to develop a more physically active lifestyle.

Juliet Michael of Natural Resources Wales, Programme Manager of Come Outside!, said: "We see the fantastic environment we have in Wales as the best gym experience you can have. It not only improves the health and wellbeing of people in these areas, but it also does wonders for the self-confidence of people who take part and it inspires and motivates them to make use of the outdoors and develop new skills. It's great when you see people trying out an activity for the first time which brings a smile to their face, and even more satisfying when you meet them weeks later and they've continued to do the activity and are really feeling the benefits of it."

On Thursday 17 July 2014 John Griffiths, Minister for Natural Resources, Culture and Sport, attended the Come Outside! Summer Celebration at Parc Penallta to celebrate the achievements of the programme. People attending had the chance to try out exciting

new activities such as geo-caching and learn bushcraft skills.



To date, the programme has supported over 400 people from Communities First areas to get outside and exercise in their local woodland and green spaces.

It has supported Penybryn walking group in 13 sessions with over 20 participants registered. New routes have been identified, and geocaching, biodiversity and heritage walks completed.

Come Outside has also supported both the Penybryn Walk Group and Hafal Blackwood in participating in healthy walks throughout the borough, with walks including Dark Sky Wales Planetarium viewings and planet geocache and quiz which had 17 participants.



Ten group members are midway through an Agored Cymru Astronomical Module of Learning in partnership with Dark Sky Wales. This will give them the knowledge and experience to recognise patterns in the sky and hopefully encourage the group to walk in the lean, dark winter months. Alongside this, one group member has undertaken Health Leaders Walk Training and will shortly be accessing a Nordic Walking Instructors Course aimed to promote sustainability within the group.

Come Outside are hoping to increase walk distance and understanding/appreciation of the natural environment with Hafal. Further geocache sessions, a hawk walk and local historical walks are in the plan for the future.

### Community Pedometer Challenge

Building on the success of the Council and Health Board run pedometer challenges, a Community Pedometer Challenge has been established with partnership work between CCBC, ABUHB, Let's Walk Cymru and local walking groups. Currently over 100 people have signed up.

For details check out [www.walespedometerchallenge.org.uk](http://www.walespedometerchallenge.org.uk)



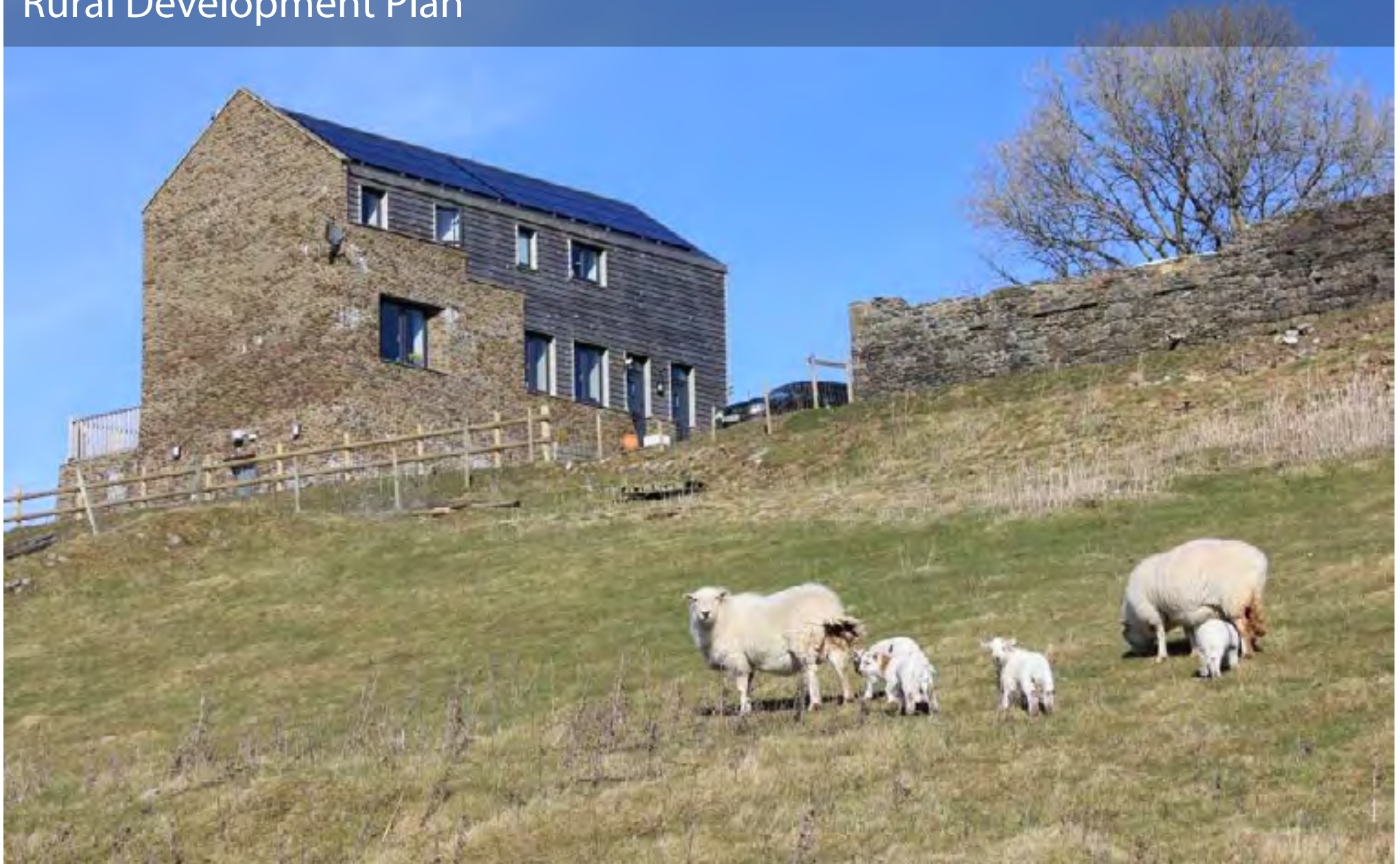
### Greener Caerphilly Annual Report

Each year the SD & LE Team puts together an Annual Report summarising the work carried out as part of the Greener Caerphilly partnership.

A copy of the reports for 13/14 and 14/15 can be found on the SD website:

<http://your.caerphilly.gov.uk/sustainablecaerphilly/>

# Rural Development Plan



# Rural Development Plan

Caerffili Cwm a Mynydd (Caerphilly Hill and Valley) is the name for the Rural Development Plan (RDP) programme in Caerphilly. During 2014/15 it delivered a number of innovative rural projects.

## Sustainable Energy Programme

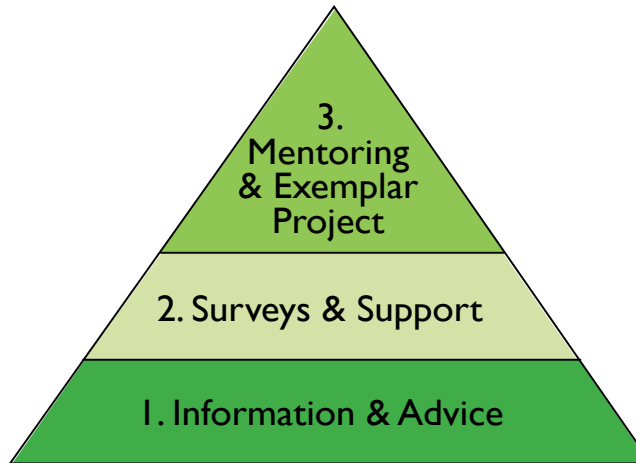
In 2011 two Sustainable Energy Officers joined the SD & LE Team. They were funded through the RDP programme to deliver the sustainable energy element of the programme. The main aim of their project was to engage with farm households and rural businesses to reduce energy use, promote the uptake of renewable energy, and help them adapt to climate change.

Energy costs are rising and energy security is an increasing issue. By promoting sustainable energy solutions the hope was to increase the profitability of farms and rural businesses and to reduce their impact on the environment.

Assistance through the Rural Development Programme is provided in eligible 'Rural Wards' or 'Rural Service Centre Wards':

## Help available to eligible farms & businesses

The RDP Sustainable Energy Team provided a 3-tiered system of support for farms and rural businesses.



### Level 1. Information and advice

Level 1 support included:

- Telephone and email advice on energy efficiency and renewable energy
- Information on grants/loans, signposting to external organisations
- Desktop solar power and wind turbine assessments
- Factsheets

## Factsheets

Although a number of national organisations have produced factsheets on energy efficiency and renewable energy technologies, the RDP Sustainable Energy Officers wanted to aim it at a local, Caerphilly level. The factsheets particularly promoted renewable energy technologies to businesses in rural areas of the county borough, as by installing renewable energy technologies they could add value to their business by countering any rising energy costs, reduce the need for security of supply, and generate an economic benefit.

In total the RDP Sustainable Energy Officers compiled 11 factsheets on a variety of subjects such as biomass, energy efficiency, feed-in tariffs, and solar photovoltaic. They contain a wide range of advice and have been distributed to those attending events, or to those who have made an initial query to the team.

## Events 2014/15

The RDP Team were engaged in an entire calendar of events promoting the programme and services it offers. The main events of the year were the Gwent Young Farmers Club Rally, the Bedwellty Agricultural Show, the Machen Agricultural Show, the Nelson Ewe Sales, and a Farming Connect event at Maes Yr Onn Farm.

## Level 2. Surveys and support

### Energy Surveys

As part of the process of promoting energy efficiency and renewable energy to farms and businesses, the RDP Sustainable Energy Team was able to offer free energy surveys. The aim of these surveys was to offer impartial and independent advice, recommending how to become more energy efficient and provide information on viable renewable energy technologies.

Once a client decided to take up this option, they were asked to gather one year's worth of energy bills prior to a site visit where a questionnaire was completed. The RDP Officer and client then surveyed and photographed the premises, looking



at appliances, controls and metering, behavioural measures, current energy efficiency, consumption, insulation of walls, roof, floor, pipes and cylinder and lighting and glazing. Following the site visit, the RDP Officer compiled a report providing advice and recommendations to improve the energy efficiency of the site. Suitable renewable energy technologies such as biomass, heat pumps, solar thermal and photovoltaic, wind turbines, and micro hydro, along with the Renewable Heat Incentive and Feed-in Tariffs were discussed. The report also provided approximate costs and paybacks and signposted relevant grant information. Following the report, officers were then on hand for further assistance. In 2014/15 one energy survey was completed for a business based in Gelligaer.

### Sector support

As part of the programme support was also provided to sectors identified within the overall RDP programme. These included tourism, timber & craft and food.

### Links to other support

A key element of the work was to identify links to other programmes and to promote the benefits to farms and rural businesses. Links were made with

Groundwork, the Energy Saving Trust (EST), Carbon Trust, Farming Connect, Nest, Ynni'r Fro, Building Research Establishment, Farmers Union of Wales and National Farmers Union.

### Caerphilly Agri Network

The RDP Sustainable Energy team continue to make links with the farming community while awaiting news on funding. This is through being involved with the Agri Network, which had been previously set up by the RDP team, assisting in coordinating meetings. The key aim of the Agri network is to generate added value, engaging with local agricultural people to identify issues and opportunities to be taken forward including projects to reduce costs, increase revenues, improve understanding on key issues, support diversification, improve efficiency, resource and energy use.



Over 20 members of the local agricultural industry attended the last meeting held in March 2015, at Penallta Rugby Club. Speakers included Glyn Davies of 'Farmers Union Wales' who provided an update on the recently mailed Single Application Form packs. Allan Mills 'Farm Watch Coordinator, Gwent Police' spoke on how to reduce farm based crime and Berry Jordan 'Common Land Development Officer' provided an update on Glastir Commons. Environmental Crime Officers from NRW also attended to provide an update on a new rivers project that is being rolled out.

Outcomes from previous meetings have resulted in dry stone walling and hedge laying training and the production of a Rural Directory that helps promote local services to the farming community.

## Rural Directory

During an Agri Network meeting there was an expression of interest by members for the RDP Officers to produce a 'rural directory' to help promote local services to the farming community in the borough.

Letters were sent to a number of farms within Caerphilly County Borough describing the intention to produce a directory and asking for assistance to initiate the work by providing information on

the businesses they already use. All businesses mentioned by the farmers were subsequently sent a letter asking if they wanted to be included and all farms and small holdings were also sent a letter.



A total of 70 businesses / organisations / societies declared an interest in participating in the free directory with 42 being located within county. There are 10 sections to the directory: Abattoirs & Meat Processing; Associations; Organisations & Societies; Auctioneers / Livestock Markets; Business Services; Construction, Building & Contractors; Forestry / Woodland; Machinery; Rural Services; Supplies and Vets. Once all completed forms by the businesses / organisations / societies were returned, the RDP

Officers worked with the CCBC Planning Technicians to develop it into a booklet. Once printed a copy was sent to all farms who are located in eligible rural wards and service centres.

## Level 3. Mentoring and exemplar projects

The 3rd tier involved detailed support on specific projects from the Sustainable Energy Officers. The aim of the development of exemplar projects was to demonstrate good practice and to showcase sustainable energy projects.

## Farm-based Biomass District Heating

Whitehall Farm is situated on the outskirts of the village of Nelson. It is a livestock farm (cattle and sheep) of approximately 180 acres, including 5 acres of woodland. There are two houses located on the holding, both of which are off the mains gas network.

In March 2013 a form was sent to farms within Caerphilly County Borough providing residents with information on the services that the RDP team offer. The owner of Whitehall farm completed and returned the form on which he stated that he was interested in participating in the Farmhouse Energy Challenge, information on an oil purchasing club, the Agri Network and help to access grants to plant



new woodland. In January 2014 the family began the Farmhouse Energy Challenge and during site visits for the challenge the residents indicated that they were interested in receiving more information on the viability of changing their heating system to biomass as they were receiving conflicting information.

The clients' interest in changing their heating from oil to biomass was to reduce their carbon footprint and to protect themselves against the rising fossil fuel costs that could threaten the viability of the business. The Renewable Heat Incentive payments were an incentive to change their heating fuel sooner rather than later.

As other farmers were also stating interest in biomass it was agreed to undertake a study into the

viability of installing biomass district heat and/or biomass heating systems for isolated farms located off the mains gas network using Whitehall Farm as an example.

RDP Officers drafted up a brief to look into biomass district heating and in June 2014 an email was sent to three consultants stating that CCBC was looking to appoint consultants to complete a study. Briar Associates were the consultants that were appointed following their submission of a proposal.

A project inception meeting (telephone based) first took place to discuss the information required and the site. Officers then provided over a years worth of fuel consumption information from Whitehall Farm for the two buildings to enable the appointed consultant within Briar Associates to carry out a pre-visit review of fuel data. A site survey took place on 1 August 2014 to look at the two houses and other agricultural buildings on site that could potentially be used as a fuel and boiler store.

Following the site visit a feasibility study was completed detailing technical and economic case for biomass district heating system for Whitehall Farm. Guidance material suitable for Caerphilly farmers interested in considering biomass heat/ biomass district heating was also completed.

## Maes Yr Onn - Off Grid Living

In May 2011 the Davies family gained planning permission to construct a farmhouse on the former site at Maes Yr Onn Farm, Manmoel, which burnt down in 1976. The site is completely off grid, with no access to mains electricity, gas, water or sewerage services. This provided the owners with difficult challenges integrating and balancing energy production and use within the property and ensuring compliance with all appropriate regulations.



In late 2011 Caerphilly County Borough Council's RDP Sustainable Energy Team stepped in by putting together a partnership with the Davies family, Building Research Establishment (BRE) and SSE to design and deliver a modern farmhouse and family home that resolves the challenges of an off grid location.

BRE were first commissioned to carry out a feasibility study of the building, taking in to account occupation, usage and power requirements. All building design work was also undertaken by Andrew Sutton, at the time Associate Director BRE South West & President, Royal Society of Architects in Wales.

A major requirement for the property was to minimise heat loss from every part of the building fabric, so the envelope of the building was designed as a super-insulated home. SSE's Contracting division installed all the power, heating and water supply technologies. These included:

- a 20kW biomass boiler
- a 3.9kW solar photovoltaic array linked to a battery system with a small diesel generator as backup, and
- rainwater-harvesting technology with a 5500 litre tank located in the basement plant room.

Living off grid means that the family needs to be constantly aware of their consumption to ensure that there is no wasteful use of lights and appliances. Over the past two years, Constructing Excellence in Wales and the Wales School of

Architecture, at Cardiff University, have been busy monitoring the family's use of the various renewable energy technologies and the overall energy and water consumption.

During the first year of monitoring the Davies family's water consumption averaged around 63 litres of water per person per day. This compares extremely well against the national average as reported by Dŵr Cymru Welsh Water as 157 l/pp/d.

Original reports suggested that the electrical energy used at the farm would be around 7kWh per day. The actual average daily usage for the family during the summer was 2.15 kWh per day. This is lower than that of a typical house connected to the mains electric, which is said to consume on average 8.8 kWh per day.

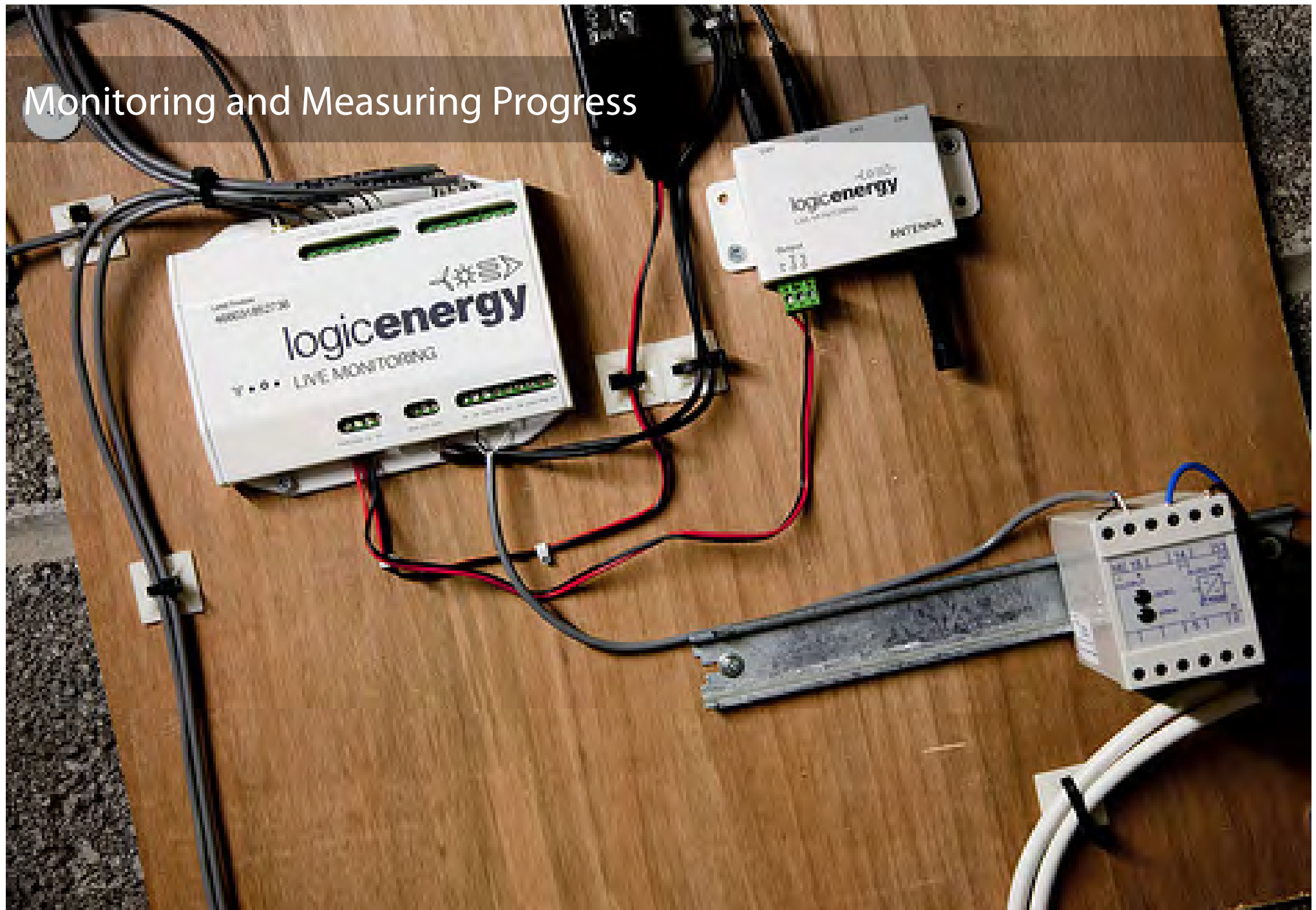
Although the family made some slight adjustments to their everyday routines, for example doing the washing and ironing on sunny days, they say that living completely off-grid hasn't significantly changed their appliance usage.

The project has been hailed as an exemplar in sustainable low carbon living, and has won several high profile accolades including the top prize at the Royal Town Planning Institute Wales awards. In June 2014 the project was visited by one of the most

senior UK representatives in the European Union, Shan Morgan, UK Deputy Permanent Representative to the EU. She was very impressed with the project and in particular was interested in how the technology could be replicated in properties both on and off the grid to encourage people to change their behaviour and use energy and water more sustainably.



# Monitoring and Measuring Progress





# Monitoring and Measuring Progress

The SD & LE Team reports to a number of groups and against the indicators in several strategies including:

- The Regeneration & Planning Division's Service Improvement Plan
- The Local Service Board Single Integrated Plan

The Team also reports to the Sustainable Development Advisory Panel, and co-ordinates the Council's report to Welsh Government as part of its commitment to the Sustainable Development Charter. The Team also prepares reports to the Greener Caerphilly Leadership Group and partners.

Some selected indicators for the work of the Team are set out in the table below:

## Funding

The Sustainable Development & Living Environment Team secured an additional £126,037 to contribute to our work in 2014/15. This includes:

- £12,431 for Caerphilly Environmental Quality projects from the Community Scheme budget
- £37,431 from Greener Caerphilly partners to match fund CEQ projects

- £71,000 from UWHA for Solar Schools Phase II
- £2,180 from Lets Walk Cymru towards the Pedometer Challenge
- £400 from Fairtrade Wales towards Fairtrade school training
- £1,595 from Sustrans towards the Strategic Cycle map project
- £1,000 from CCBC Tourism for the strategic Cycle map project

**£126,037 Total secured**

Indicator	2008/09 Actual	2009/10 Actual	2010/11 Actual	2011/12 Actual	2012/13 Actual	2013/14 Actual	2014/15 Target	2014/15 Actual
Number of Services supported	4	5	5	7	5	5	5	5
The number of staff on the 'Cycle to Work Scheme'	New PI	New PI	104	221	291	360	375	390
The percentage of schools with a Green Flag award under the Eco Schools programme	32%	39.5%	51.6%	58%	62%	67%	70%	71%
The number of education for sustainable development training with schools	New PI	New PI	128	102	89	89	100	91
Number of staff on our "Car share database"	New PI	New PI	293	321	342	354	380	384
Number of sustainable travel events held	New PI	New PI	10	13	11	9	9	6
Number of Climate Change Woodlands created	New PI	New PI	1	3	3	5	2	1
Farms and rural businesses advised on sustainable energy issues	New PI	New PI	New PI	28	28	37	40	51

# Sustainable Development and Living Environment Team



# Sustainable Development and Living Environment Team

The Sustainable Development and Living Environment Team is part of the Regeneration & Planning Division, based in Ty Pontllanfraith, Pontllanfraith Blackwood.

The team is currently made up of 4 officers.

**Paul Cooke**  
**Team Leader, Sustainable Development and Living Environment.**

Paul is responsible for coordinating the work of the Greener Caerphilly Outcome Theme of the Single Integrated Plan and for leading on Sustainable Development issues with the Authority. This includes raising awareness of living environment and sustainability issues and ensuring that the principles are embedded in the policies and procedures of the Authority.

**Tracy Evans**  
**Education for Sustainable Development Officer.**

Tracy became the Education for Sustainable Development Officer in October 2004, having previously worked in environmental waste management. Her main role is to raise awareness and understanding of Education for Sustainable Development and Global Citizenship across the county borough as well as supporting the sustainable development work within the authority.

Tracy works closely with the county borough's schools on the Eco Schools initiative, and has been instrumental in continuously improving the standards of the eco-schools programme and school ESGC work through training the pupils, teachers, headteachers and governors in sustainable development and global citizenship issues.

**Kelly Silcox**  
**RDP Sustainable Energy Officer**

Kelly was appointed as one of two RDP Sustainable Energy Officers in May 2011, having previously worked for an environmental charity, providing energy advice to individuals and businesses. Her main role is to engage with farming and rural businesses in the county borough on energy issues, raising awareness of the implications of climate change, and promoting sustainable energy solutions.

**Melanie Phillips**  
**RDP Sustainable Energy Officer**

Melanie joined the Team in 2011, having worked for CCBC for 13 years, providing environmental support and advice to businesses in Caerphilly. Melanie's role is also to engage with farming and rural businesses in the county borough on energy issues, raising awareness of the implications of

climate change, and promoting sustainable energy solutions.