

a. The Organisation

Deeside College is an FE College and is now based at four sites across North East Wales. The College is an independent corporation providing an education & training service for the Welsh Assembly Government as well as the Skills Funding Agency (SFA), local business & commerce. Apart from the need to operate within the parameters of the FE sector, Deeside College does not have a parent organisation.

In August 2009, Deeside College merged with the Welsh College of Horticulture, Northop and 12 months later a further merger was completed with Coleg Llysfasi and Wrexham Training. Each site will be individually audited in respect to accreditation to the Green Dragon Environmental Management System.

The newly expanded College now employs approx 890 staff and attracts 18,000 enrolments per year.

The size of the College's campuses are:-

➤ Deeside	36,000 m ²
➤ Northop	15,100 m ²
➤ Llysfasi	6,100 m ²
➤ Wrexham	1,600 m ²

Achievements and targets for 2009/10 include Deeside, Holywell and Northop with the targets for 2010/11 incorporating Llysfasi and Wrexham.

b. Green Dragon Environmental Standard

In 2001 the Governors of Deeside College, supported by the Senior Managers, being aware of the increased profile given to environmental issues and a realization of the impacts created by the College's operations, decided to identify its impacts and pro-actively manage environmental issues. The aim was to ensure those impacts were reduced to a minimum, allow the College to discharge its legal obligations and meet its social responsibility.

To ensure policies and procedures were developed and implemented to a recognised standard, the College decided to become an active participant in the "Green Dragon" environmental standard supported by the Welsh Assembly Government.

The Deeside site has progressed and developed its Environmental Management System (EMS) in line with the five levels of the Green Dragon scheme using professional advice and support, allowing the EMS to meet the requirements of the Green Dragon standard and exceed them wherever possible.

Procedures and activities are now in the process of being extended to Coleg Llysfasi, Northop College and Wrexham Training, to enable compliance for each of those sites to the Green Dragon scheme.

In recognition of the College's commitment, suitably qualified staff have been employed with an allocated budget established to ensure future development of the system. This investment supports various initiatives and strategies designed to contribute to a sustainable future and encourage others to adopt similar aims.

The College's commitment to a sustainable future is fully supported at all levels within the organisation, from CEO, Governors, Directors, Heads of Programmes, employees, students and visitors, as well as contractors and sub-contractors. The College encourages others to adopt sustainable strategies whenever possible.

The Sustainability Group is in place with sub-groups located at the other sites to assist and support the local site.

c. Activities, Products & Services of the Organization

Deeside College offers a wide range of academic and vocational qualifications in a variety of settings with subject areas such as:-

Deeside	Administration & Business; A Levels; Art, Design & Media; Beauty & Complementary Therapies; Catering & Hospitality; Children's Care, Learning & Development; Construction; Electrical/Mechanical Engineering; Fabrication & Welding; General Education; Hairdressing; Health & Social Care; Information & Communication Technology; Motor Vehicle Studies; Prospects – Skills for Life & Work; Public Services; Skills for Independent Living; Sports & Leisure; Travel & Tourism and the Welsh Baccaalaureate.
Holywell	Cafe and Information & Communication Technology.
Llysfasi	Agriculture; Animal Care; Engineering – Land Based Machinery; Forestry & Conservation; General Education and a working Farm.
Northop	Animal Care; Engineering – Land Based; Floristry; General Education; Horse Care & Management; Horticulture; Motor Vehicle Studies and Skills for Independent Living.
Wrexham	Beauty & Complementary Therapies; Hairdressing and Motor Vehicle Studies.

Across the sites, the College provides a number of catering facilities producing a range of cooked meals, deli and freshly made sandwiches along with hot and cold drinks. This provision is also made at the Futures@Holywell internet cafe facility. The catering areas operate during the College's normal trading hours, with Y Celstryn Bar opening during some evenings to accommodate external bookings/charity events.

Deeside College has taken the lead in the development and provision of the new Welsh Baccaalaureate qualification. This course of study has been developed with Global Citizenship and Sustainability modules included and has created significant interested in sustainability throughout the College and wider.

The Estates & Facilities Department conducts or co-ordinates all reparatory and maintenance work on all of the College's properties. The department manages a small in house team at each campus to carry out such works. The Department also includes the HS&S Officer supported by a small H&S team. The Department has the capability to engage external contractors, as and when required.

d. Sustainability Policy

The wording of the Sustainability Policy is as follows:-

The Corporation is aware that under relevant environmental legislation it has a duty to recognise and reduce its key environmental impacts. The Corporation is fully committed to sustainability and has determined an approach to support the protection and conservation of the environment. The College requires its social corporate responsibilities to be considered by all staff across all College premises and in all aspects of its activities. Measures to enhance sustainability are to be implemented where it is both practical and viable.

It is our policy to:-

- Ensure compliance with all current relevant environmental legislation and adopted policies which will contribute to a sustainable future.
- Ensure the development and maintenance of the highest standards of management systems and procedures which prevent pollution and seek continual improvements in addressing issues of sustainability including carbon reduction.
- Integrate sustainability into all aspects of the College business to ensure that the College's activities contribute to the successful development of society while considering the effect on the environment.
- Optimise the efficient use of natural resources and reduce that usage to the minimum, considering energy efficiency and use of recycled materials into all new services or buildings.
- Promote both waste reduction and the re-use of materials while providing recycling systems and actively encouraging their use.
- Support a purchasing policy that is committed to enhancing a sustainable future and advertising such to encourage others to adopt a similar approach.
- Ensure employees are trained and aware of their environmental responsibilities and provide support to others in obtaining environmental training.
- Integrate the concept of sustainability and a global citizenship into Business and Curriculum areas of the College, wherever possible.
- Support community based programmes and initiatives which demonstrate best practice and promote the need for a sustainable future.
- Monitor progress via the Sustainability Development Group on a regular basis to identify areas for improvement, set measurable targets, and report openly/publicly on an annual basis on the progress in achieving those targets.

In order to implement this policy the Corporation has allocated responsibilities and resources as appropriate. It will liaise with staff, unions, authorities and other interested parties regarding issues of sustainability and global citizenship. The Corporation considers these aims to be of paramount importance.

The Sustainability Policy is authorised and endorsed by the Principal/CEO of Deeside College. It was reviewed and re-issued for the new academic year, signed and dated January 2011.

Sustainability Management System

The SMS is based on the Green Dragon system which consists of a Policy, Responsibilities, Implementation, Monitoring and Auditing. These documents in turn support the Sustainability Management System (SMS) and include procedures and guidelines which are controlled through the College's staff intranet system. This is a bespoke system created, installed and maintained by the College's ICT Services Department. Updates to the design of the system are made on request from the appropriate department.

Access to the documentation is freely available to all employees on a "read-only" basis to eliminate any unauthorized changes to the documentation. Selected documents are accessible to students via the student's intranet. Other elements are made available to staff, students and the public via the College's website www.deeside.ac.uk.

Documentation amendments are made by the HS&S Officer on request of the Head of Estates & Facilities with any amendments controlled by protection via the QMS programme.

Amendments to documentation can be in response to:-

- Sustainability Development Group/Sub-Group recommendations;
- Management / Documentation reviews of SMS;
- Audit Recommendations;
- Changes in legislation;
- Amendments to the Green Dragon Standard;
- Following an environmental incident;
- Observations from staff / students / visitors.

The documentation is reviewed annually by the Sustainability Development Group to ensure it remains effective and current.

e. Management Review

The management review is conducted annually by the Sustainability Development Group, Chaired by the HR Director. The group is notified by the issuing of an agenda that a review is to be undertaken. The agenda is accompanied by an instruction to review all policies, procedures and guidelines which make up the SMS prior to the meeting. The agenda is issued together with key documents (policy, responsibilities and organisation chart) plus any documents which are known at the time to be in need of amendment. At the meeting there is free discussion to determine if any document, procedure or guideline requires to be amended. If so, the proposed amendment is considered and if approved by the Group the action required to implement the amendment is initiated.

Significant or strategic changes would be sanctioned by the Board of Governors. Other amendments are sanctioned by the Senior Management Team, if warranted. If not warranted, amendments are sanctioned by the Sustainability Development Group.

Once authorised, amendments will be undertaken as indicated above. Any amendments will be notified to those affected and the amendments highlighted via the staff update (newsletter). Any training or equipment required to implement those amendments will be arranged and provided through the Facilities Department and monitored by the HS&S Officer.

f. Significant Environmental Aspects & Impacts

The College has identified the following as their significant Environmental Aspects/Impacts:-

i. Energy Consumption (Electric & Gas)

The increase in size of the College due to merger with Llysfasi, Northop and Wrexham inevitably means an increase in energy use; however with systems already introduced the College hopes to limit increases to a minimum.

The College introduced the "Action Energy" scheme into Deeside and aims to extend this further into the other sites. Faculties or departments, where the energy is metered and the use of that energy is restricted to activities and areas under that Faculties' managerial control are issued an energy budget. This is detailed in section G. Current Initiatives.

The College has installed new double glazing, automatic lighting controls, timers on air compressors plus electrical and gas sub-meters, with new and refurbished buildings incorporating sub-meters as standard. The College sites benefit from a computerised energy management system.

All new and refurbished builds are constructed using a minimum of 10% recycled products and meet the latest standards of energy conservation.

Use of solar power at the Deeside Site allows 80% of the College's domestic hot water to be pre-heated by the sun. This technology significantly reduces the College's demand for gas, reduces its CO² omissions and provides a working demonstration for staff and students involved in a range of courses.

ii. Water Consumption

The Deeside site has managed a significant decrease in its consumption of water against the previous year despite its growth, due to the measures that have been implemented across the College sites.

The rainwater harvesting system which was installed at the 14-19 Pathway Centre at Deeside has now been extended into the main College toilet block. Rainwater harvesting has also been installed at the new Learning Centre at Northop and this will also be introduced into the new Small Animals Unit, also at Northop.

Measures taken to help manage water consumption include:-

Fitting timers on urinal flushers; timed water taps; regular monitoring; investigation of any increase in consumption; resolution of increases in consumption in a timely manner and rainwater harvesting systems.

iii. **Waste Generation**

With the extended College sites, there is now a mixture of waste generated from those activities:-

Deeside - General waste includes a mixture of food stuffs, plastic bottles, paper, cardboard, office furniture and office consumables such as printer cartridges and other stationery items. The Deeside site has a total of 19 recycling streams with the latest focusing on batteries.

Llysfasi - General waste is as indicated at Deeside but includes various agricultural wastes. Recycling systems are being introduced at this site during the 2010/11 period.

Northop - General waste is as indicated at Deeside but includes various horticultural wastes. The Northop site has a total of 7 recycling streams with the latest focusing on printer cartridges and batteries.

Wrexham - General waste is as indicated at Deeside. Recycling systems are being introduced at this site during the 2010/11 period.

With the increase in the number of students and sites, the amount of waste generated has also been increased, but this increase has been met by additional recycling by our general waste contractor.

iv. **Transport**

The College's fleet has now increased across all sites, however with the employment of the full time Vehicles Officer, the original fleet inherited from the mergers has been reviewed and streamlined. Members of staff plan travel accordingly to ensure minimum mileage is travelled.

The claiming of mileages by College staff along with declaration of vehicle mileages for fleet and hire vehicles enables the College to monitor usage and compare with set targets.

The College benefits from an excellent commercial bus service, free student transport to and from College alongside a fleet of minibuses for the Northop site. In order to encourage staff and students to cycle to College secure bicycle storage is provided along with showers.

v. **Paper Consumption**

The College's paper consumption has increased following merger and the increase in student numbers. Staff are briefed to consider the use of paper when not absolutely necessary; prompts appear automatically on emails to encourage reduction in printing. The College monitors its paper use through the purchasing department by operating an environmentally sensitive purchasing policy, with the monitoring of use through printers and photocopiers now regularly monitored via the ICT Services/Finance/HS&S Departments.

The College has converted to 100% recycled A4 paper, whilst marketing and College literature is now printed using vegetable inks on 70% recycled paper.

A new contract has allowed more energy efficient photocopiers to be installed with back to back printing as the default position. Where possible the College is also installing double sided printers with staff encouraged to use this option at all opportunities.

g. Current Initiatives

The “Action Energy” Scheme

In order to encourage staff, students and visitors to reduce energy consumption, the College has introduced the Action Energy Scheme. Faculties or departments where the energy is metered and the use of that energy is restricted to activities and areas under that managerial control will be eligible for an Energy Budget.

These energy budgets are created by calculating the predicted annual consumption for the area in both kWh and financial terms based on the previous year’s consumption, the target set includes a 1% reduction in the use of electricity from the previous year.

Any money saved from the allocated budget will be re-invested into the department to buy new equipment, with any overspend being retrieved from the energy budget.

The scheme has now been running for 3 years, with the Engineering Department having reduced their consumption by 49,120 kWh since the first year. Following on from that success, the scheme has now been introduced into the Construction Department with the intention for this to be extended across the College sites where the criteria for the scheme are met.

The “Waste Pays” Scheme

In order to encourage student participation in recycling, the College developed an innovative recycling scheme. The Student Association is funded via the amount of plastic recycled. This creates an environment in which peer pressure and the student’s desire “not to let the side down” can be utilized to increase the amount recycled.

The project is acting as a medium for understanding costs, social responsibility and environmental awareness. Incremented payments shown below ensure continuing student participation over a longer period of time. Students are introduced to the scheme via induction.

- For every m³ of plastic recycled up to 100 m³ the Students Association will receive £3.00
- For every m³ of plastic recycled up to 200 m³ the Students Association will receive £4.00
- For every m³ of plastic recycled up to 300 m³ the Students Association will receive £5.00

After 12 months of paying £5.00 this payment system will be reviewed.

The scheme has seen an increase from the first year’s achievement of 2.125 m³ from landfill to approximately 150 m³ during 2009/10. The College is confident that the targets set for 2010/11 can be achieved and has invested further in additional plastic recycling bins to raise the profile further, across all sites.

h. Criteria for Assessing Aspects & Impacts

Sustainability Impact Assessments considering both the environmental risk and commitment are carried out by the HS&S Officer. Guidelines for this provide a quantitative risk based approach, which allows us to identify HIGH, MEDIUM or LOW risk and enables to respond accordingly.

i. Targets & Achievements

For the purpose of this report, we assess our impact on the environment by using our Carbon Footprint. Details of our Targets & Achievements are documented and available through our staff intranet and the Deeside College website.

Calculation

In calculating our Carbon Footprint in future years, we will incorporate all impacts:-

- Energy (Gas, Electricity, Oil & LPG)
- Paper
- Transport
- Waste
- Water

and employ accredited formulas to convert each to CO²e.

Results

Overall Carbon Footprint 2009/10	3,171.5 tonnes CO ² e
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Targets

Having completed all building works at Deeside, the College will now adopt a 3% reduction year on year to its overall Carbon Footprint, commencing September 2011.

j. Greenhouse Gas Emissions

The College's only emissions to atmosphere are created by separate boiler plants across the sites. Deeside benefited from investment into new boiler plant in 2008 with Northop benefitting from replacement of their dated boiler plant late in December 2010. Ground and air source heat pumps will be fitted in the new buildings at Northop. Existing boiler plants at Deeside and Northop are gas fired, with oil fired plants at Llysfasi and Wrexham.

Annex 3 under the Green Dragon Level 5 (2006) standard has not been completed, as all is accounted for in Annex 2 of the standard.

k. Other Data

All measuring & monitoring of environmental data is reflected within the current objectives & targets.

l. Legal Compliance

Each College activity is considered in regard to its importation of raw materials and services; their use, by-products, end product and waste against relevant legal standards. Using a variety of sources, including Workplace Law and Carbon Trust Legal Updates the Head of Estates & Facilities/HS&S Officer keep up to date with changes in legislation. As a result if the Legal Register requires amendment this is implemented immediately with the Sustainability Group notified. A review of the Legal Register is conducted by the HS&S Officer annually.

Environmental audits are completed by the Internal Environmental Auditor with reports completed directly to the Head of Estates & Facilities/HS&S Officer. Non-compliances are identified and prioritised for relevant action.

Workplace audits and inspections are undertaken by the Facilities Department which incorporates environmental aspects of the operation. Concerns are recorded and reported to the Heads of Programmes, Directors and the HS&S Officer. Non-compliances are identified and prioritised for relevant action.

A Legal Compliance report is submitted to the SDG for review annually.

There were no reports of non-compliance made in the academic year 2009/10.

I. Prevention & Mitigation of Pollution Incidents

Deeside College is committed to pollution prevention with environmental accidents/incidents being reported directly to the HS&S Officer for immediate assessment and action.

The College has reviewed its activities and considers that these pose minimal risk of ground, air or water pollution.

There were no pollution reports made in the academic year 2009/10.

m. Commitment to Sustainable Development

Action taken 2009/10

Commitment and support for the development of a Sustainable environment is embedded within the College, with staff and students from all levels across the organisation actively participating in various environmental initiatives.

Future plans

- Continue to develop environment within the Welsh Baccalaureate programme
- Develop the provision of accredited solar panel installation courses
- Installation of new fuel tank at Northop campus
- Enhance the College's internal auditing resources
- Enhance sub-metering across all sites

Learning Centre, Northop

- Automatic Metering
- Rainwater Harvesting
- Automatic Lighting
- Ground Source Heat Pumps
- Eco Warrior Energy Display Unit

Small Animal Unit, Northop

- Green Roof
- Automatic Lighting Controls
- Heating Controls
- Automatic Metering
- Rainwater Harvesting

Other Environmental Projects

To date the College has invested in the following sustainability projects:-

- £20,000 in Automatic Lighting Controls
- £23,000 in Solar Panel technology
- £1,000 in Sub-Metering
- £725,000 into heating and domestic hot water boiler systems and their controls plus the enhancement of a computerized energy management control system
- The installation of rainwater harvesting system in the Flintshire Learning Pathways building

o. Any Other Relevant Issues

The College frequently appears in newspaper articles highlighting their good environmental practices; examples of this include awards, Action Energy Payments and the Waste Pays Scheme. The College received an Envirowise Green Star Award in November 2009 in recognition of its Waste Pays Scheme.

This publicity and links with local commerce and participation in various groups and initiatives allows the College to support and influence others in adopting a sustainable approach.

Deeside College has established a pro-active Sustainability Development Group which manages and encourages college wide co-operation on sustainable issues, these range from training, procurement, fair trade, energy consumption, waste management and recycling.

Deeside College has successfully incorporated Global Citizenship and Sustainability into the curriculum in particular the Welsh Baccalaureate. This example is now being followed by other educational establishments throughout Wales.

The College accepts the need to ensure that the next generation is well versed in the subject and is prepared to invest and work hard in order that students understand and appreciate the need to preserve the environment.

The Governors of Deeside College, Senior Managers, staff and students consider sustainability to be of paramount importance and are committed to embedding such an approach in all its undertakings and wherever possible supporting and encouraging others to do likewise.

May Day Pledge

As part of the College's commitment to the environment and sustainability, the College signed up to the Prince's May Day Network which means that we joined others committed to taking action on climate change by making a pledge to at least one of the following areas:-

- 1) To calculate the company's carbon footprint.
- 2) Report the carbon footprint publicly or to Business in the Community.
- 3) Set an absolute target and take action to reduce the company's emissions.
- 4) Encourage employees to reduce their carbon footprint at home and at work.
- 5) Work in partnership with suppliers to reduce emissions in the supply chain.
- 6) Mobilise customers to take action.

From the list shown above, we have committed ourselves to 1, 2, 3, 4 and 6. The College remains part of the May Day Network and plays a full and active part in the scheme.

Sustainable Development Charter

The College has signed up to the Welsh Assembly Government Sustainability Development Charter which requires the College to commit to making sustainable development the central organising principle in how we make our decisions and carry out our work. This means we will be:-

- Clear about our role, responsibilities and commitments in relation to sustainable development;
- Provide clear leadership for sustainable development, with our organisations and with those we work with;
- Promote continuous improvement so that we continue to reduce the environmental impact of all our activities;
- Embed sustainable development into all our decision-making, including financial decision-making;
- Strive to be an exemplar organisation, to lead and inspire others to act.

Deeside College acknowledges its Corporate and Social responsibility, the need to maintain legal compliance, and the need to conserve and protect the environment. It is the intention of the College to adopt best practice when addressing issues relating to sustainability and encourage others to do likewise.

The College appreciates the importance and credibility afforded by the Green Dragon Environmental Management System and is proud of its Level 5 accreditation at Deeside. In recognition of its commitment to reducing its impact on the environment, it is the intention that all sites within the Deeside College Group will be accredited into the Green Dragon scheme by September 2011.

Signed: _____
Principal / Chief Executive