

SUSTAINABILITY REPORT 2016/17



1. Introduction and Organisational Overview

Pembrokeshire College is a Further Education College based in Haverfordwest, Pembrokeshire, serving learners in South Wales.

Pembrokeshire College's mission is to provide the highest quality education, training and support services for all its learners. There are five faculties comprised of academic and vocational areas and incorporate work based learning. Work based learning spans Pembrokeshire and other counties across Wales. The College is also the Lead Provider for B-WBL which is the work-based learning consortium for south Wales. There are also numerous departments providing resources and support services. It is estimated around 2,000 students pass through the College per day during term time and there are 15,000 students enrolled per annum. The College employs approximately 500 staff.

Pembrokeshire College has adopted a holistic approach in reducing carbon reductions across its activities and operations. All areas of operation have been reviewed and a planned improvement programme has been implemented which is reaping rewards in terms of CO₂ savings and also financial savings. Such is the College's commitment to improving energy efficiency that financial savings made have been re-invested into other environmental schemes.

The College has excellent facilities and equipment notably in the Learning Resource Centre computing and IT suites, and for design and multi-media studies. The College has invested over £12m in its facilities over the last 8 years, which includes a £3.2m innovation centre, a £3.8m construction centre, a £4m engineering wing and refurbishment scheme and a £6.6m extension housing science labs, fitness suite, sports hall and classrooms.

Pembrokeshire College has two main sites, a main campus based at Haverfordwest and a smaller site (MITEC) at Milford Haven. Four additional sites have been acquired for delivering training as part of the College work programme on behalf of the Welsh Government.

The Haverfordwest campus is located on the outskirts of Haverfordwest and comprises a large multi-storey building covering 17,400m² and a second smaller technology building of 1771m², a third building of 1957m² which is the first Further Education building to achieve BREEAM excellence rating at both design and post completion assessment stages in Wales or England which opened in 2008.

As part of the BREEAM excellence rating programme, an ecology survey was undertaken and the College has plans to implement some initiatives to improve conditions and encourage biodiversity around the site.

There are no tree preservation orders on the College.

This reports sets out to review the College's progress in managing its environmental aspects and impacts. This report will form part of the College's environmental improvement programme to achieving the Green Dragon Environmental Management Standard[®] Level 5.

Pembrokeshire College has in place a Sustainable Development Policy embedded into the Green Dragon Environmental Management System.

Sustainability Awards

The College has secured the following environmental and sustainability awards during the course of their continued improvement work:

- Shortlisted for two UK Green Gown Awards in November 2012 in the following categories.

- Continuous Improvement
- Modernisation and efficiency in the Estate
- UK Green Gown Space Efficiency category - Highly Commended 2011
- UK Green Gown Carbon Reduction category - Winner 2010
- Green Dragon Level 5, 2011 and reaccredited in subsequent years
- UK Green Gown Continuous Improvement category - Highly Commended 2009
- UK Green Gown Construction and Refurbishment category - Highly Commended 2009
- UK Sustainability Awards 2008 Runner-up in New Build Category
- Welsh BREEAM Award winner 2008

2 Sustainable Policy Overview

Pembrokeshire College recognises that its key impacts on the environment are as a result of the consumption of energy, emissions from transport and generation of waste.

The College's governing body, supported by the executive and senior management team, is committed to raising the profile of sustainable development and environmental issues with staff and students right across its full range of activities by achieving Green Dragon status at its main Haverfordwest campus. The aim is to reduce our impact on the environment and to ensure that all future plans and developments are conducted with due regard to sustainability so that the college fulfils its legal and social responsibilities.

This commitment to continual environmental improvement, pollution prevention, and sustainable development means that Pembrokeshire College will work to minimise its impact through;

- Promoting the protection of the environment and minimising the impact of its activities on the local, regional and global environment.
- Promoting and integrating sound environmental and ethical management policies, practices, and awareness at the College.
- Ensuring Compliance with all relevant Environmental Legislation
- Making efficient and environmentally responsible use of energy and other resources
- Minimising waste by reduced consumption and developing effective waste management and recycling procedures.
- Developing a green transport strategy to encourage the use of energy efficient public and communal transport, bicycles and walking
- Building environmental considerations into procurement, seeking assurances of responsible environment practices from trading partners and where appropriate discriminating in favour of environmentally efficient goods and services
- Attaining BREEAM Excellence rating for new builds
- Communicating with relevant stakeholders about environmental matters and achievements, especially students, staff and the local community
- Promoting the use of the Welsh Language
- Integrate sustainability into all its planning and development procedures
- Ensure appropriate employees are trained and aware of their environmental responsibilities
- Ensure that all opportunities are taken to incorporate sustainable development, environmental awareness and global citizenship into curriculum and learning activities
- Monitor progress via the Health, Safety and Environmental management structures and the sustainable development and environment group at the college.

The policy will be reviewed annually and communicated to all staff and be publicly available. Triggered by an energy audit in 2003 the College became aware of the increased profile given to environmental issues and a realisation 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 became an active participant in the “Green Dragon” environmental standard supported by the Welsh Government.

The College 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.

In recognition of the College’s commitment, suitably qualified staff have been employed with an allocated budget established to ensure continued 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. The College encourages others to adopt sustainable strategies wherever possible. A Management Review of the full Environmental Management System is carried out annually. This is a forum for continual improvement and looks at achievements and progress towards objectives and targets, legal compliance and the management systems’ effectiveness.

Activities, Products & Services of the Organisation

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

- Administration & Business;
- Animal Care;
- A Levels;
- Art, Design & Media;
- Beauty & Complementary Therapies;
- Catering & Hospitality;
- Children’s Care, Learning & Development;
- Construction;
- Electrical/Mechanical Engineering;
- Fabrication & Welding;
- Hairdressing;
- Health & Social Care;
- Information & Communication Technology;
- Motor Vehicle Studies;
- Public Services;
- Skills for Independent Living;
- Sports & Leisure;
- Travel & Tourism; and
- Welsh Bacalaureate.

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. The catering areas operate during the College’s normal trading hours, with the College restaurant opening during some evenings to accommodate external bookings.

The College remains a leader in the development and provision of high quality learning and incorporates Educational Sustainable Global Citizenship within its courses.

The Estates & Facilities Directorate conducts or co-ordinates all reparatory and maintenance work on all of the College's properties. The Directorate manages a small in-house team to carry out such works. The Directorate also includes responsibility for environmental management and has a suitable qualified manager in place to oversee this activity. The Directorate has the capability to engage external contractors, as and when required.

Environmental Management System

The EMS is based on the Green Dragon Environmental Management System which consists of a Policy, Responsibilities, Implementation, Monitoring and Auditing. These documents in turn support the Environmental Management System (EMS) 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 documentation is freely available to all employees on a "read-only" basis to eliminate any unauthorised changes to the documentation. Selected documents are accessible to students via the student's intranet.

Amendments to documentation can be in response to:

- Sustainability Group recommendations;
- Management/Documentation reviews of EMS;
- 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 HSE Committee ensure it remains effective and current.

Significant Environmental Aspects & Impacts

The College has identified the following as their significant Environmental Aspects/Impacts following a risk assessment process:

Demand for electricity is primarily lighting, cooling, electrical equipment and compressors and recognises that there will always be demand for this. Therefore the College has in place strategies to try and reduce consumption as far as possible. To this extent the College has reduced its consumption by 30% over the last fifteen years.

Gas is used as the primary heat generator for the Main College building and as a secondary source for the TIC and Construction Centre. The primary source of heating for the later buildings is a biomass boiler. Gas is also used in the kitchens and for producing hot water. The College has installed a number of solar thermal panels over the last few years to assist with heating hot water.

To meet our legal requirements, Display Energy Certificates (DEC's) are completed annually with an approved Contractor. Improvements have been achieved since the initial DEC's due to the measures taken to reduce energy consumption and more accountability from additional sub-metering.

Water Consumption

The College has managed to reduce water consumption considerable over the last ten years, due to the measures that have been implemented.

Measures taken to help manage water consumption include:-

Installing waterless urinals, spray taps, reducing W.C. cistern sizes, investigation of any increase in consumption; resolution of increases in consumption in a timely manner and rainwater harvesting systems.

Waste Generation

Within the College site, there is now a mixture of waste generated from activities which is as follows:

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 College is registered with the Natural Resources Wales as a producer of Hazardous Waste. Waste is managed by the Estates and Facilities department. Waste is stored in bins around the site and also in a designated area to the rear of the building. Paper and cardboard is recycled and a cardboard compactor is used to bale cardboard. The College is currently classified as a 'non-waste' Framework Directive Exemptions site. However, although not requiring an exemption the College complies with the terms and conditions of the exemptions.

Waste transfer notes, consignment notes and copies of waste carriers and management licences are held centrally by the Estates and Facilities department and other documentation is held by individual departments.

The College has already implemented several waste minimisation initiatives including;

- Setting double sided printing as default
- Printing for staff is usually done through the reprographics unit and charged back to the department which has increased awareness about spend on paper
- Poly pockets are no longer supplied.

Transport

The College's fleet has now been reviewed and streamlined. Members of staff plan travel accordingly to ensure minimum mileage is travelled. There is an electric car available for local journeys.

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

The College however, suffers from a poor public transport services to its site which is further hindered by the geographical area which the College serves. However, a free student transport to and from

College service is provided for student aged under 19. In order to encourage staff and students to cycle to College secure bicycle storage is provided along with showers.

Office Activities

Reprographics undertakes the majority of the Colleges printing work and uses the majority of paper purchased for the site. Double-sided printing is set as default in the College. Off cuts of paper and waste paper are recycled, paper is also reused as scrap to reduce wastage.

The IT department have taken a number of initiatives to improve sustainability. The College is targeting an actual reduction of 20% in printing, this will be achieved by following up any individual member of staff or a team of staff who are printing excessive amounts. The IT department have installed A5 booklet printing option for when there is simply no substitute to printing, this simple change of approach reduces every multi-page job by half and the legibility is the text is very good.

The communal printers installed are more efficient than their predecessors. They take high yield toner cartridges which reduces the environmental impact. The projectors installed throughout the College are 25% more efficient than the previous models. These are set on an auto eco mode. If you're in a classroom with the lights switched off, the image will go dimmer. Plus, the projectors will automatically shut down after 3 minutes if no input signal is detected.

The College has also introduced 50 low power consumption thin client terminals for Scheduled Online Learning and Assessment (SOLA) in the Learning Resource Centre. These models only use 30% of the power of a PC and has enabled us not to increase our demand for air conditioning in this area.

Communication and Training

Staff are made aware of environmental issues including recycling and the environmental policy during induction sessions. Environmental Awareness training is embedded in the HSE staff development program, this is evidenced on the HSE Training Needs Analysis and registers of attendance. Tool box talks are used by managers to inform staff of policy and procedures.

The College has contact with several external interested parties including Natural Resources Wales through its registration as a producer of hazardous waste, Welsh Water through the provision of services, Local Authority licence the premises for public entertainment and Welsh Assembly Government.

The College has a complaints procedure which is the responsibility of the Deputy Principal, however environmental incidents are reported to the HSE Manager.

The environmental performance of suppliers is considered in some cases, for example, under the requirements for the BREAAAM excellence rating, there are certain obligations the contractor has to meet.

Criteria for Assessing Aspects & Impacts

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

Targets & Achievements

Details of our Targets & Achievements are documented and available through our staff intranet and the College website. A summary is as follows;

Aim	Objectives	KPI	Responsible/ Resources	Start Date	Target Deadline
A supportive culture and a safe and sustainable environment	Investigate the source of the increase in overnight electricity consumption and run a campaign to reduce the overnight consumption.	10% reduction	HSE Team / Steve Jones	05/09/2017	31/07/2018
	Capture all of the environmental and sustainability projects and work that is done in the community through the curriculum and promote them to build our community profile	Capture 2 projects a term to develop the process into College culture	HSE Team	05/09/2017	31/07/2018

The following table sets out the Colleges achievements in relation to gas, water and electricity consumption.

	Gas Consumption (Khh)	Electricity Consumption (KWh)	Water Consumption (M ³)	Floor Area – Main Campus (M ²)	Energy per KWH/M ²
02/03	3,059,897	1,903,446	15,728	15,513	319
03/04	1,443,624	1,655,506	8240	17,284	179 (-44%)
04/05	1,341,912	1,420,538	6500	16,755	165 (-8%)
05/06	1,529,586	1,479,791	6832	16,755	179 (+8%)
06/07	1,384,874	1,404,798	6787	16.755	166 (-7%)
07/08	1,420,173	1,425,295	6768	16,540	172 (+4%)
08/09	1,484,891	1,529,299	6529	18,497	162 (-6%)
09/10	1,522,549	1,370,476	6305	19,151	151 (-7%)
10/11	1,440,709	1,389,861	7026	19,151	147 (-3%)
11/12	1,082,397	1,345,050	5489	19,151	126 (-14%) + 61% decrease from 02/03
12/13	1,308,557	1,298,021	5602	19,151	136 (+8%)
13/14	1,124,948	1,222,062	6487	19,151	123 (-10%)
14/15	1,221,923	1,216,124	5701	19,151	128 (+4%)
15/16	1,275,343	1,203,928	5502	19,151	130 (+2%)
16/17	1,362,475	1,283,243	6354	19,151 (excludes 2,400m ² of Campus 6)	138 (+6%)

Greenhouse Gas Emissions

The College's only emissions to atmosphere are created by separate boiler plants across the sites. Air source heat pumps have been fitted in the new engineering wing.

Carbon Emissions (kgs)	
15/16	16/17
858,027	817,119

Other Data

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

Legal Compliance

College activity is considered in regard to its importation of raw materials and services; including workplace law and Carbon Trust Updates, the Head of Estates & Facilities/HSE Manager keep up to date with changes in legislation. As a result if the Legal Register requires amendment this is implemented immediately by the HSE Manager. A review of the Legal Register is conducted by the HSE Manager annually.

Environmental Management System audits are completed by the HSE Manager. Non-compliances are identified and prioritised for relevant action.

Workplace audits and inspections are undertaken by the Heads of Department which incorporates environmental aspects of the operation. Concerns are recorded and reported to the Head of Estates & Facilities and the HSE Manager. Non-compliances are identified and prioritised for relevant action by the HSE Manager.

A Legal Compliance report is submitted for review annually.

There were no reports of non-compliance made in the academic year 2015/16.

Prevention & Mitigation of Pollution Incidents

Pembrokeshire College is committed to pollution prevention with environmental accidents/incidents being reported directly to the HSE Manager 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 2015/16.

Commitment to Sustainable Development

Action taken since 2012 to improve sustainability include the following projects:

- The continuation of a food co-operative for local suppliers.

- A further expansion of the building management system.
- Installation of LED lighting in some corridor areas.
- Provision of free cooling to the main server room.
- A further expansion of the building management system.
- A scheme to provide free cooling to other server rooms.
- A second phase of installing LED light fittings to corridor areas.
- Food waste recycling in kitchens.
- Purchase of electric car
- Communal bins in corridors to encourage recycling
- Provision of energy efficient communal printers
- Provision of printing solutions to reduce printing
- Installation of new energy efficient projectors
- Triple glazing improvements to Velux windows
- Variable speed drive fans in catering

Any Other Relevant Issues

The College has obtained a number of national awards for the Environmental work they have been undertaking as follows:

- Breeam - Excellent
 - Green Dragon Level 5
 - Runner Up – UK Building Magazine
 - Green Gown Awards
- 2009
Highly Commended – Continuous Improvement Institutional Change
Highly Commended – Sustainable Construction and refurbishment
- 2010
Winner – Carbon Reduction
- 2011
Highly Commended – Space Efficiency

The College has Environment and Sustainable Development as standing items on both the HSE Committee and Staff Voice Forum which work in line to manage and encourage college wide co-operation on sustainable issues, these range from training, procurement, fair trade, energy consumption, waste management and recycling.

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.

Sustainable Development Charter

The College has signed up to the Welsh Government Sustainability Development Charter which requires the College to commit to making sustainable development the central organising principle in how we make our decision 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 improvements so that we continue to reduce the environmental impact of all our activities;

