

Unit 34: Environmental Policies and Practices

Unit code:	A/600/6232
QCF Level 3:	BTEC National
Credit value:	10
Guided learning hours:	60

● Aim and purpose

The aim of this unit is to develop learners' knowledge of the impact of pollution and environmental hazards, the legal and regulatory framework which supports sustainability and the need for sustainable development.

● Unit introduction

It is generally agreed that demands placed on local, national and international resources and environmental systems, for example water, land, minerals and air, are unsustainable. An international definition of sustainable development is 'development which meets the needs of the present without compromising the ability of future generations to meet their own needs'. Globally we are failing to meet the needs of the present in terms of ensuring access to food, clean water and economic viability for all of the world's population and to fully consider the needs of future generations.

This unit looks at some of the issues contributing to this situation. Learners will find out about the key environmental impacts that international, central and local government policies and initiatives aim to address.

At the heart of much study around environmental issues is an understanding of the guidelines and legislation in place to advise and support many government initiatives. Learners will find out about these and the role of various bodies making policy and ensuring policy is implemented.

Learners will investigate the need for sustainable development, the role of pressure groups in campaigning for it and the impact sustainable development is having on the provision of public services, including the national and international strategies and targets the public sector is striving to put in place and achieve.

● Learning outcomes

On completion of this unit a learner should:

- 1 Know the impact of pollution and environmental damage
- 2 Know the legal and regulatory framework which supports sustainability
- 3 Understand the need for sustainable development.

Unit content

1 Know the impact of pollution and environmental damage

Pollution: air pollution eg sulphur dioxide, carbon monoxide, greenhouse gases, benzene

Environmental damage: noise pollution including traffic, industry, neighbourhood; visual intrusion eg buildings, business signs, graffiti; global warming and climate change eg increased flooding risks; depletion of natural resources including minerals, oil; use of landfill sites

Impacts: on individuals; on UK society including on flora and fauna, climate change, environmental impact eg reuse of polluted land, pollution of water supplies, opencast and deep mine coal, quarries and landfill, need for restoration and after care eg landfill and mining sites

2 Know the legal and regulatory framework which supports sustainability

Legislation and guidelines: eg the EU Landfill Directive, Waste Electronics and Electrical Equipment (WEEE), End-of-Life-Vehicles (ELV), Waste Strategy 2000, UK Sustainable Development, Municipal Waste Recycling Act 2003, Management of Hazardous Waste (2004), other pollution legislation

UK government initiatives: central eg energy efficiency grants, public education, target setting for public services; local eg recycling schemes

International initiatives: Kyoto Protocol; Copenhagen Conference; EU policies including environmental policy making eg climate change, industry and technology, land use, biodiversity, noise, sustainable development, waste, water

Role of Environment Agency: protect and improve the environment; promote sustainable development; deal with environmental issues eg environmental permitting, flood, pollution and emissions, waste, water; ensuring compliance with regulations and legislation including agriculture, chemicals, construction, food and drink, waste management; regulation including direct regulation, environmental taxes, trading, negotiated and voluntary agreements, provision of advice and guidance

Role of Defra: eg animal health and welfare, environmental, sustainable development, wildlife and countryside

Role of Sustainable Development Commission: monitoring and reporting on government achievements

3 Understand the need for sustainable development

Concepts of sustainability: development to meet present and future needs; sustainable consumption and production; changing product and service design, production, use, disposal to maximise use of resources and maximise reuse

Impact of climate change: reducing greenhouse gas emissions, preparing for climate change impact

Use of natural resources: natural resources that sustain life including water, air, soil

Building sustainable communities: eg developing green, open spaces, energy-efficient buildings, Code for Sustainable Homes

Strategies for sustainable development: including Rio Earth Summit (1992) and Agenda 21, UK government strategies including Securing the Future, current EU strategies, UK local authorities Sustainable Community Strategies

Impact on public sector: government policies including planning regulations eg for green buildings and technologies; challenges for government including targets to reduce waste, water consumption and emissions from road travel; UK-wide targets for 80 per cent emissions reduction by 2050

Role of pressure groups: raising public awareness; influencing government policy; involvement in mainstream politics eg Green Party; campaigns and events; local, national and international pressure group activity

Assessment and grading criteria

In order to pass this unit, the evidence that the learner presents for assessment needs to demonstrate that they can meet all the learning outcomes for the unit. The assessment criteria for a pass grade describe the level of achievement required to pass this unit.

Assessment and grading criteria		
To achieve a pass grade the evidence must show that the learner is able to:	To achieve a merit grade the evidence must show that, in addition to the pass criteria, the learner is able to:	To achieve a distinction grade the evidence must show that, in addition to the pass and merit criteria, the learner is able to:
P1 outline the impact of pollution and environmental damage on individuals and society in the UK		
P2 identify domestic and international legislation and guidelines which support reduction of damage to the environment	M1 explain how the regulatory bodies support sustainability	
P3 identify the role of the UK government departments and regulatory bodies in supporting sustainability		
P4 outline the need for sustainable development	M2 analyse how pressure groups work to promote sustainability	D1 critically analyse UK public sector progress towards achieving strategies for sustainability.
P5 explain the role of pressure groups in promoting sustainability		
P6 explain the impact of sustainable development on the UK public sector.	M3 justify the targets set for the public sector to contribute to improving sustainability.	

PLTS: This summary references where applicable, in the square brackets, the elements of the personal, learning and thinking skills applicable in the pass criteria. It identifies opportunities for learners to demonstrate effective application of the referenced elements of the skills.

Key	IE – independent enquirers	RL – reflective learners	SM – self-managers
	CT – creative thinkers	TW – team workers	EP – effective participators

Essential guidance for tutors

Delivery

Delivery of this unit should focus on active and experiential learning and the opportunities for learners to research aspects of the content and contribute to classroom discussion – both with their tutor and with appropriate public service personnel.

When delivering the unit, it is important that the tutor uses current examples of environmental policies and practices, and up to date examples of the effects that these have.

The unit should also cover current issues, concerns and achievements. The content of this unit is potentially large and tutors should tailor delivery to issues of interest to their learners within their local community.

Tutors should make sure that the information on the websites used for research is reliable and objective in its coverage of the issues to be investigated.

For learning outcome 1, learners will benefit from researching relevant local information related to air, noise and visual pollution. Air pollution will differ from district to district, for example rural and urban areas. Learners should know about likely local air pollutants and how they can be managed. Noise pollution can be direct, for example noisy neighbours and loud music or ambient for example industrial or traffic noise. Visual pollution such as, street signage, buildings, litter or graffiti, can be as much of a pollutant as polluted air and excess noise and learners will benefit from direct observation and from recording pollution levels in the local area. Learners should be given the opportunity to look at case studies.

For learning outcome 2, a broad overview of the current legislation and regulatory framework should be provided. It is not intended that learners study this in depth, but rather that they develop an appreciation of the complexity of the range of local, national and international guidance and regulation. This learning outcome also requires learners to look at some of the UK regulatory bodies that monitor compliance with regulations and guidelines.

For learning outcome 3, learners need to explore the concepts of sustainable development and the challenges set for its development to ensure the planet is able to sustain population and development in the future.

Delivery is enhanced where groups of learners take responsibility for researching specific aspects of unit content (as agreed with the tutor) and presenting their findings to other learners in the peer group using presentation slide shows, posters, leaflets, exhibitions, quizzes and other activity-based approaches. This helps learners to develop the personal, learning and thinking skills (PLTS) which are an essential part of their overall programme, in particular teamworking, independent enquirer and creative thinking skills.

Outline learning plan

The outline learning plan has been included in this unit as guidance and can be used in conjunction with the programme of suggested assignments.

The outline learning plan demonstrates one way in planning the delivery and assessment of this unit.

Topic and suggested assignments/activities and/assessment
Tutor introduces the unit and outlines the assessment.
The impact of pollution and environmental hazards on individuals and society. Tutor input. Internet research on tutor-directed sites. Case study approach. Classroom discussion. Visits.
Overview of domestic and international legislation and guidelines which support reduction of damage to the environment. Tutor input. Internet research on tutor-directed sites.
Role of regulatory bodies including the UK Environment Agency and the Sustainable Development Commission in supporting sustainability. Tutor input. Internet research on tutor-directed sites. Case study approach. Classroom discussion.
Assignment 1: Pollution and Hazards and Attempts to Manage These (P1, P2, P3, M1)
Includes learner-initiated private study.
Sustainable development – definitions and concepts. Consequences of not acting. Tutor input. Internet research on tutor-directed sites. Classroom discussion.
Role of local, national and international pressure groups in promoting sustainability. Visiting speakers from selected groups. Tutor input. Internet research on tutor-directed sites. Classroom discussion.
Impact of sustainable development on the UK public sector. Research on latest progress towards national and international targets. Tutor input. Classroom discussion
Assignment 2: Sustainability (P4, P5, P6, M2, M3, D1)
Includes learner-initiated private study.
Review of unit and assignments.

Assessment

When assessing the unit, it is to be expected that the learners use current legislation and current examples of the impact that pollution can have on the community.

For P1, learners must provide an overview of the impact of pollution and environmental damage on individuals and UK society. Ideally, learners should use examples from visits where they have seen for themselves the impacts of environmental damage.

For P2, learners need to identify current legislation and guidelines (both national and international) which aim to support sustainability and in P3 this is developed to look at how government departments and regulators aim to support the moves to sustainable development. For M1, learners need to explain how regulatory bodies support the legislative and regulatory framework designed to promote sustainability.

For P4, P5 and P6, learners need to explore what sustainability is and how climate change and the use of natural resources must be addressed. They need to show that they understand how pressure groups have added to the debate and how the drive for sustainability has impacted on public services. M2 requires learners to analyse how pressure groups work to promote sustainability. It is recommended that learners are directed to undertake in-depth research into two UK-focused environmental pressure groups and use them to support their analysis.

For M3 and D1, learners need to research the strategies and targets set within both the UK and internationally and justify and critically analyse the progress made by UK public services toward achieving these strategies and targets.

Programme of suggested assignments

The table below shows a programme of suggested assignments that cover the pass, merit and distinction criteria in the assessment and grading grid. This is for guidance and it is recommended that centres either write their own assignments or adapt any Edexcel assignments to meet local needs and resources.

Criteria covered	Assignment title	Scenario	Assessment method
PI, P2, P3, M1	Pollution and Hazards and Attempts to Manage Them	Produce a report showing the impact of pollution and environmental damage and the attempts made to support sustainability.	Report, presentation, exhibition, interview.
P4, P5, P6, M2, M3, D1	Sustainability	Produce a report showing the need for the public sector to set and work to strategies for sustainability.	Report, presentation, exhibition, interview.

Links to National Occupational Standards, other BTEC units, other BTEC qualifications and other relevant units and qualifications

This unit forms part of the BTEC Public Services sector suite. This unit has particular links with:

Level 3
Government, Policies and the Public Services
International Institutions and Human Rights

Essential resources

Learners need access to ICT, including the internet.

Employer engagement and vocational contexts

It is vital that this unit is delivered using a range of case studies and scenarios drawn from real situations involving the impact of pollution and environmental damage and the recognised need for governments (national and international) and both public and private sector to work towards strategies for sustainability.

Delivery of this unit will be enhanced if learners have the opportunity to visit a range of environments to observe the impact of pollution and environmental damage, or work to mitigate the impact of such damage. For example, visits to areas where coal mining resulted in pit heaps; to complex motorway intersections where air pollution has impacted on communities; to industrial sites where chemical waste has made rebuilding problematic.

Talks from relevant public service personnel and representatives from a range of pressure groups are vital for learners to relate the content of this unit to real scenarios. Pressure group representatives and public service personnel should be asked to contribute to the design and assessment of assignments, including setting real assignment briefs and attending events and presentations where the outcomes of learner work are reviewed.

Case studies showing how public, private and third sector organisations have made steps towards sustainable development are readily available on the internet and these should be used, ideally supported with input from personnel from the relevant organisation.

The use of relevant (tutor directed) websites and literature is also essential for successful delivery of this unit.

Indicative reading for learners

Textbooks

Allen R E (editor) – *Human Ecology Economics: A New Framework for Global Sustainability* (Routledge, 2007)
ISBN 9780415770910

Cato M S – *Green Economics: An Introduction to Theory, Policy and Practice* (Earthscan, 2008)
ISBN 9781844075713

Field B C and Field M K – *Environmental Economics* (McGraw-Hill Higher Education, 2008)
ISBN 9780071276245

Ison S, Peake S and Wall S – *Environmental Issues and Policies* (Pearson Education, 2002)
ISBN 9780273646242

Söderbaum P – *Understanding Sustainability Economics: Towards Pluralism in Economics* (Earthscan, 2008)
ISBN 9781844076277

Journals

Environment, Development and Sustainability: A Multidisciplinary Approach to the Theory and Practice of Sustainable Development ISSN 1387585X (print version) ISSN 15732975 (electronic version)

Journal no 10668: Springer Netherlands

Case studies

There is a wealth of case studies available on the internet (from a range of reputable organisations) that will help learners. Examples are given below.

www.thetimes100.co.uk/case-study--what-is-sustainable-development%3F--56-245-2.php

www.sustainabilityatwork.org.uk/casestudies

www.sustainablebuild.co.uk/case-studies-category.html

www.eauc.org.uk/sorted/leadership_management

Sustainability Suits Southwark College – an example of a college integrating sustainability into the curriculum and engaging its students to make them more environmentally aware.

www.eauc.org.uk/sorted/files/southwark.pdf

Community-Campus – Learner Involvement at Wiltshire College – Wiltshire College's 'Community-Campus' provides a clear and effective way to ensure student engagement in sustainability, whilst ensuring compliance with Government initiatives.

www.eauc.org.uk/sorted/files/wiltshire_final.pdf

Websites

Department for Environment, Food and Rural Affairs	www.defra.gov.uk
Direct Government	www.direct.gov.uk/en/Environmentandgreenerliving
The Eco Friendly Directory	www.green-providers.co.uk/fair_trade_and_environmental_charities_14.html
Eden Project	www.edenproject.com
Energy Saving Trust	www.energysavingtrust.org.uk
Environment Agency	www.environment-agency.gov.uk/business/regulation/31981.aspx
Envirowise	www.envirowise.org.uk
EU and Environment	ec.europa.eu/environment/eussd
Kyoto Protocol	unfccc.int/kyoto_protocol/items/2830.php
Natural Resources Defense Council (USA)	www.nrdc.org/about
Sustainability Online Resource and Toolkit for Educators	www.eauc.org.uk/sorted/home
Sustainable pressure groups	www.sustainablestuff.co.uk/SustainablePressureGroups.html

Delivery of personal, learning and thinking skills

Although no PLTS opportunities are identified within this unit as an inherent part of the assessment criteria, there are opportunities to develop a range of PLTS through various approaches to teaching and learning.

Skill	When learners are ...
Independent enquirers	analysing how pressure groups work to promote sustainability justifying the targets set for the public sector to contribute to improving sustainability
Creative thinkers	critically analysing UK public sector progress towards achieving strategies for sustainability
Team workers	working with other learners to research information and public service organisations
Self-managers	completing assignment work for submission
Effective participators	taking part in classroom discussions.

● Functional Skills – Level 2

Skill	When learners are ...
ICT – Find and select information	
Select and use a variety of sources of information independently for a complex task	critically analysing UK public sector progress towards achieving strategies for sustainability
Access, search for, select and use ICT-based information and evaluate its fitness for purpose	researching information and public service organisations
ICT – Develop, present and communicate information	
Present information in ways that are fit for purpose and audience	presenting their assignment evidence
English	
Speaking and listening – make a range of contributions to discussions and make effective presentations in a wide range of contexts	presenting their assignment evidence
Reading – compare, select, read and understand texts and use them to gather information, ideas, arguments and opinions	researching information and public service organisations
Writing – write documents, including extended writing pieces, communicating information, ideas and opinions, effectively and persuasively	presenting their assignment evidence.