



# **OTHM LEVEL 7 DIPLOMA IN ENVIRONMENTAL AND SUSTAINABILITY MANAGEMENT**

Qualification Number: 610/3662/6

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Specification | **JANUARY 2024**

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## QUALIFICATION OBJECTIVES

The objective of the OTHM Level 7 Diploma in Environmental and Sustainability Management is intended to develop learners' understanding of contemporary issues of sustainability, environmental management with the inclusion of ESG in policy, theory and practice.

Learners are provided with an opportunity to understand the current trends in the business world and engage with challenges facing professionals and policy makers in their own country. It provides knowledge that underpins the ability to work as an effective manager or a consultant in the sector.

The qualification offers mandatory and optional units. The aim of the mandatory units is to ensure that all students reach a good level of awareness of environmental and sustainability issues relating to management and develop language and terminology to be able to have an informed conversation with practitioners. The optional units allow students to explore further areas relating to the environment and sustainability in their area of interest.

Learners will develop an understanding of sustainability as a physical phenomenon and its financial and non-financial impact on business performance, governance of private and public bodies, policy making and society. Students will become familiar with key international agreements that are currently driving the sustainability agenda and will appreciate how aspects of leadership and culture impacts change.

Successful completion of this qualification will allow learners to work in a variety of roles within business strategy, consulting roles as well as roles in the non-profit sector or government.

## QUALITY, STANDARDS AND RECOGNITIONS

OTHM Qualifications are approved and regulated by Ofqual (Office of Qualifications and Examinations Regulation). Visit the [Register of Regulated Qualifications](#).

OTHM has progression arrangements with several UK universities that acknowledges the ability of learners after studying Level 3-7 qualifications to be considered for advanced entry into corresponding degree year/top up and Master's/top-up programmes.

## REGULATORY INFORMATION

Qualification Title	OTHM Level 7 Diploma in Environmental and Sustainability Management
Ofqual Qualification Number	610/3662/6
Regulation Start Date	26/01/2024
Operational Start Date	29/01/2024
Duration	1 Year
Total Credit Value	120 Credits
Total Qualification Time (TQT)	1200 Hours
Guided Learning Hours (GLH)	600 Hours
Sector Subject Area (SSA)	3.4 Environmental conservation
Overall Grading Type	Pass / Fail

Assessment Methods	Coursework
Language of Assessment	English

## EQUIVALENCES

The OTHM Level 7 diplomas on the Regulated Qualifications Framework (RQF) are at the same level as master’s degrees. However, they are shorter (120 credits) and learners will have to proceed to the dissertation stage (60 credits) with university to achieve a full masters programme.

## QUALIFICATION STRUCTURE

The OTHM Level 7 Diploma in Environmental and Sustainability Management qualification consists of 4 mandatory units and 5 optional units (with candidates taking 6 units in total), 120 credits, 1200 hours Total Qualification Time (TQT) and the recommended Guided Learning Hours (GLH) for this qualification is a minimum of 600 hours.

### Mandatory Units:

Unit Ref No	Unit Title	Level	Credit	GLH	TQT
J/650/9704	Fundamentals of Sustainability	7	20	100	200
K/650/9705	Environmental Science and Energy Transition	7	20	100	200
M/650/9707	Environmental Management in Organisations	7	20	100	200
T/618/0798	Research Methods	7	20	100	200

### Optional Units:

Unit Ref No	Unit Title	Level	Credit	GLH	TQT
R/650/9708	Delivering Transformational Change	7	20	100	200
T/650/9709	Advanced Principles of Net Zero	7	20	100	200
D/650/9710	Environmental Politics and Policies	7	20	100	200
K/650/9723	Sustainable Finance	7	20	100	200
L/650/9706	Sustainability as a Business Strategy	7	20	100	200

## DEFINITIONS

**Total Qualification Time (TQT)** is the number of notional hours which represents an estimate of the total amount of time that could be expected to be required in order for a learner to achieve and demonstrate the achievement of the level of attainment necessary for the award of a qualification.

*Total Qualification Time is comprised of the following two elements –*

- a) *the number of hours which an awarding organisation has assigned to a qualification for Guided Learning, and*
- b) *an estimate of the number of hours a Learner will reasonably be likely to spend in preparation, study or any other form of participation in education or training, including assessment, which takes place as directed by – but, unlike Guided Learning, not under*

*the Immediate Guidance or Supervision of – a lecturer, supervisor, tutor or other appropriate provider of education or training.*

*(Ofqual 15/5775 September 2015)*

**Guided Learning Hours (GLH)** are defined as the hours that a teacher, lecturer or other member of staff is available to provide immediate teaching support or supervision to a learner working towards a qualification.

**Credit value** is defined as being the number of credits that may be awarded to a learner for the successful achievement of the learning outcomes of a unit. One credit is equal to 10 hours of TQT.

## ENTRY REQUIREMENTS

These qualifications are designed for learners who are typically aged 21 and above.

The entry profile for learners is likely to include at least one of the following:

- Relevant Level 6 qualification. Normally an Honours degree (or equivalent) from a recognised institution.
- Demonstration of relevant professional experience. Applicants should have at least 3 years professional experience in the field (learners must check with the delivery centre regarding this experience prior to registering for the programme)

**English requirements:** If a learner is not from a majority English-speaking country, they must provide evidence of English language competency. For more information visit the [English Language Expectations](#) page on the [OTHM website](#).

## PROGRESSION

Successful completion of the OTHM Level 7 Diploma in Environmental and Sustainability Management enables learners to progress into or within employment and/or continue their further study. As this qualification is approved and regulated by Ofqual (Office of the Qualifications and Examinations Regulation), learners are eligible to progress to Master's top-up programmes at many universities in the UK and overseas with advanced standing. For more information visit the [University Progressions](#) page on the [OTHM website](#).

## DELIVERY OF OTHM QUALIFICATIONS

OTHM do not specify the mode of delivery for its qualifications, therefore OTHM centres are free to deliver this qualification using any mode of delivery that meets the needs of their learners. However, OTHM centres should consider the learners' complete learning experience when designing the delivery of programmes.

It is important that centres develop an effective delivery method to teaching and learning that supports the progression and stretch of learners.

OTHM Centres must ensure that the chosen mode of delivery does not unlawfully or unfairly discriminate, whether directly or indirectly, and that equality of opportunity is promoted. Where it is reasonable and practicable to do so, it will take steps to address identified inequalities or barriers that may arise.

Guided Learning Hours (GLH) which are listed in each unit gives centres the number of hours of teacher-supervised or direct study time likely to be required to teach that unit.

## ASSESSMENT AND VERIFICATION

All units within this qualification are assessed and internally quality assured by the centre and externally verified by OTHM. The qualifications are Criteria referenced, based on the achievement of all the specified learning outcomes.

To achieve a 'pass' for a unit, learners must provide evidence to demonstrate that they have fulfilled all the learning outcomes and meet the standards specified by all assessment criteria. Judgement that the learners have successfully fulfilled the assessment criteria is made by the assessor.

Specific assessment guidance and relevant marking criteria for each unit are made available in the Assignment Brief document. These are made available to centres immediately after registration of one or more learners.

The assessor should provide an audit trail showing how the judgement of the learners' overall achievement has been arrived at.

### Assessment Tracking and Recording Learner Progress

It is necessary to track and record learner achievement throughout the delivery period of the Diploma and this should not be left until the end of the course.

This will include regular review of learner work through formative and summative assessment and internal quality assurance at planned intervals during the programme:

- before decisions have been made on any unit
- sampling evidence once one or two of the units or assignments are completed.

Tracking learner progress, recording the achievement of each learner per criteria on a unit-by-unit basis ensures:

- the assessment evidence is clearly measured against national standards.
- learner progress is accurately tracked.
- the assessment process can be reliably verified.
- evidence is valid, authentic and reliable for the safety of certification.
- identification of which assessments are outstanding.
- internal verification is timely.
- samples for standards verification and other external audits can be made available as required.
- up to date, securely stored assessment records help to minimise the risk of assessment malpractice and potential issues, maintaining the integrity of the qualification.

Tutors/Assessors should provide learners with formative and summative feedback to aid development during their studies.

### Formative Assessment

Formative assessment is an integral part of the assessment process, involving both the Tutor/Assessor and the learner about their progress during the course of study.

Formative assessment takes place prior to summative assessment and focuses on helping the learner to reflect on their learning and improve their performance and does not confirm achievement of grades at this stage.

The main function of formative assessment is to provide feedback to enable the learner to make improvements to their work. This feedback should be prompt so it has meaning and context for the learner and time must be given following the feedback for actions to be complete. Feedback on formative assessment must be constructive and provide clear guidance and actions for improvement.

All records should be available for auditing purposes, as we may choose to check records of formative assessment as part of our ongoing quality assurance.

### **Summative Assessment**

Summative assessment is used to evaluate learner competence and progression at the end of a unit or component. Summative assessment should take place when the assessor deems that the learner is at a stage where competence can be demonstrated.

Learners should be made aware that summative assessment outcomes are subject to confirmation by the Internal Verifier and External Quality Assurer (EQA) and thus is provisional and can be overridden. Assessors should annotate on the learner work where the evidence supports their decisions against the assessment criteria. Learners will need to be familiar with the assessment and grading criteria so that they can understand the quality of what is required.

Evidence of both formative and summative assessment **MUST** be made available at the time of external quality assurance – EQA.

## **RECOGNITION OF PRIOR LEARNING AND ACHIEVEMENT**

Recognition of Prior Learning (RPL) is a method of assessment that considers whether learners can demonstrate that they can meet the assessment requirements for a unit through knowledge, understanding or skills they already possess and do not need to develop through a course of learning.

RPL policies and procedures have been developed over time, which has led to the use of a number of terms to describe the process. Among the most common are:

- Accreditation of Prior Learning (APL)
- Accreditation of Prior Experiential Learning (APEL)
- Accreditation of Prior Achievement (APA)
- Accreditation of Prior Learning and Achievement (APLA)

All evidence must be evaluated with reference to the stipulated learning outcomes and assessment criteria against the respective unit(s). The assessor must be satisfied that the evidence produced by the learner meets the assessment standard established by the learning outcome and its related assessment criteria at that particular level.

Most often RPL will be used for units. It is not acceptable to claim for an entire qualification through RPL. Where evidence is assessed to be only sufficient to cover one or more learning outcomes, or to partly meet the need of a learning outcome, then additional assessment methods should be used to generate sufficient evidence to be able to award the learning outcome(s) for the whole unit. This may include a combination of units where applicable.

## **EQUALITY AND DIVERSITY**

OTHM provides equality and diversity training to staff and consultants. This makes clear that staff and consultants must comply with the requirements of the Equality Act 2010, and all other related equality and diversity legislation, in relation to our qualifications.

We develop and revise our qualifications to avoid, where possible, any feature that might disadvantage learners because of their age, disability, gender, pregnancy or maternity, race, religion or belief, and sexual orientation.

If a specific qualification requires a feature that might disadvantage a particular group (e.g. a legal requirement regarding health and safety in the workplace), we will clarify this explicitly in the qualification specification.



## **UNIT SPECIFICATIONS**

## Fundamentals of Sustainability

Unit Reference Number	J/650/9704
Unit Title	Fundamentals of Sustainability
Unit Level	7
Number of Credits	20
Total Qualification Time (TQT)	200 Hours
Guided Learning Hours (GLH)	100 Hours
Mandatory / Optional	Mandatory
Sector Subject Area (SSA)	3.4 Environmental conservation
Unit Grading Type	Pass / Fail

### Unit Aims

We live in an era where humans pose the greatest threat to natural ecosystems and wildlife, the very systems we depend on economically, socially, psychologically, and spiritually. This unit covers fundamental understanding of sustainability and related concepts and provides a solid foundation for the rest of your studies. Through the course of the unit, students will; examine the relationship between sustainability, resilience, business growth and social responsibility; explore why there is an urgency to tackle environmental challenges and that environmental challenges and social challenges are inextricably interlinked; the importance of international collaboration and key international development initiatives to date; and, explore different ethical perspectives and how they can be used to guide daily behaviour of individuals and organisations.

### Learning Outcomes, Assessment Criteria and Indicative Content

Learning Outcome – The learner will:	Assessment Criteria – The learner can:	Indicative Content
1. Understand the key concepts of sustainability and their relation to economic growth and development.	1.1 Describe the most used definitions of sustainability and corporate social responsibility (CSR.)  1.2 Explain how sustainability differs from CSR and why unsustainable CSR may pose a reputational and financial risk for organisations.	Corporate Social Responsibility (CSR): <ul style="list-style-type: none"> <li>○ CSR is a self-regulating business model that assists a company to be socially accountable to the public, itself, and its' shareholders. By implementing CSR - also known as 'corporate citizenship' - businesses can be conscious of the</li> </ul>

	<p>1.3 Analyse the reasons behind “tragedies of the common” and why sustainability must be approached at a systemic level.</p>	<p>specific impact they’re having on society, including environmental, economic and social.</p> <ul style="list-style-type: none"> <li>○ Definition of sustainability, difference from CSR.</li> <li>○ Unsustainable CSR. Greenwash. Examples, implications.</li> <li>○ Sustainable consumption. Earth Overshoot Days. If we consider the end of life, can we still conclude that Malthus was wrong?</li> <li>○ Triple Bottom Line.</li> </ul> <ul style="list-style-type: none"> <li>● Introduction to Systems thinking and systems resilience. Tragedy of the commons.</li> </ul> <p><i>NB: Systems thinking is covered in detail by Unit 5 – Delivering Transformational change</i></p>
<p>2. Understand the context of sustainability and the reasons for urgent action, with a special focus on climate change and biodiversity.</p>	<p>2.1 Define the nine planetary boundaries and the meaning of systems resilience.</p> <p>2.2 Explain the meaning of ecosystem services and their relationship with organisations, products, services, and human needs.</p> <p>2.3 Analyse the current focus on climate change and biodiversity loss and the reasons why these areas dominate agendas of most governments.</p> <p>2.4 Critically assess the impact of global trends on the Triple Bottom Line and the need for transition towards sustainability.</p>	<p>Resilience of the planet:</p> <ul style="list-style-type: none"> <li>○ The Nine Planetary boundaries</li> <li>○ Climate change</li> <li>○ Change in biosphere integrity (biodiversity loss and species extinction)</li> <li>○ Stratospheric ozone depletion</li> <li>○ Ocean acidification</li> <li>○ Biogeochemical flows (phosphorus and nitrogen cycles)</li> <li>○ Land-system change (for example deforestation)</li> <li>○ Freshwater use</li> <li>○ Atmospheric aerosol loading (microscopic particles in the atmosphere that affect climate and living organisms.)</li> <li>○ Introduction of novel entities</li> <li>○ Approaches to valuing nature. Ecosystem services.</li> <li>○ The meaning of (dynamic) resilience.</li> </ul>

		<ul style="list-style-type: none"> <li>○ Major threats and transformation of the natural world – the “burning platform” (waste, Climate Change, biodiversity, population growth, child labour, social inequality.)</li> </ul> <p>Climate change:</p> <ul style="list-style-type: none"> <li>○ What does climate science tell us? (IPCC technical report.)</li> <li>○ Global warming and its consequences.</li> </ul> <p>Delivering social progress within planetary boundaries:</p> <ul style="list-style-type: none"> <li>○ “Doughnut economics”:</li> <li>○ Triple Bottom Line (environment, society, economy)</li> </ul>
<p>3. Understand the role of private enterprises and innovation in the transition to sustainability.</p>	<p>3.1 Describe how sustainability issues present risks and opportunities for business in both a local and a global context.</p> <p>3.2 Explain why actions of governments are not sufficient to tackle environmental and social challenges.</p> <p>3.3 Explain the meaning of externalities and how to tackle undesirable externalities through innovation in process, product, and reporting.</p> <p>3.4 Analyse the industries that most contribute to climate change and environmental degradation to evaluate how they can tackle the problem at both a local and a global level.</p> <p>3.5 Evaluate why private enterprises and innovation are critical for the delivery of the transition to sustainability.</p>	<p>Sustainability Issues:</p> <ul style="list-style-type: none"> <li>○ Plastic Pollution</li> <li>○ Water Shortage</li> <li>○ Biodiversity</li> <li>○ Climate Change</li> <li>○ Air Pollution</li> <li>○ How can these be viewed as risks and opportunities?</li> <li>○ Sustainability maturity</li> </ul> <p>Key industries, from the perspective of environmental degradation:</p> <ul style="list-style-type: none"> <li>○ Oil &amp; gas</li> <li>○ Energy &amp; heat</li> <li>○ Agriculture</li> <li>○ Transport</li> <li>○ Built environment.</li> <li>○ Banking and finance.</li> <li>○ The above contributions to Climate Change and environmental degradation and how they tackle it (or not.)</li> </ul>

		<p>Externalities:</p> <ul style="list-style-type: none"> <li>○ Meaning of externalities. “Gain is private, loss is public.”</li> <li>○ Traditionally, negative externalities (e.g. air pollution) were considered a problem for the government and for the regulator. It is not sufficient; externalities need to be included in companies P&amp;Ls and tackled from inside of the organisation rather than wait for industry regulators.</li> <li>○ Emergence of mandatory non-financial reporting and disclosure.</li> </ul>
<p>4. Understand the need for global initiatives and treaties on sustainability and climate change.</p>	<p>4.1 Discuss the role of the key international institutions and agreements that contribute to sustainable development.</p> <p>4.2 Analyse the impact of international initiatives and treaties on policies of individual states and regions.</p> <p>4.3 Evaluate the importance of global initiatives and treaties for sustainable development.</p>	<p>Key international agreements on climate change and sustainable development, at a high level:</p> <ul style="list-style-type: none"> <li>○ The Rio Declaration on Environment and Development</li> <li>○ United Nations Framework Convention on Climate Change (UNFCCC). Non-Annex 1 countries.</li> <li>○ Paris Accord.</li> <li>○ Kunming-Montreal Global Biodiversity Framework</li> <li>○ UN Sustainable Development Goals (Agenda 2030)</li> </ul> <p><i>NB: International collaboration and international agreements are covered in detail by Unit 7 - Politics and Policies.</i></p>
<p>5. Understand the principles and perspectives of business ethics and its use in discussions regarding climate change and sustainability.</p>	<p>5.1 Identify sources of ethical guidance that can be used in daily professional practice to promote sustainability.</p> <p>5.2 Describe the meaning of an ethical culture of an organisation and the implications of unethical behaviour.</p>	<p>An introduction to business ethics:</p> <ul style="list-style-type: none"> <li>○ Elements of Business Ethics and areas of application (individual, employees, Board, customer, supplier, community, outer environment).</li> </ul>

	<p>5.3 Critically evaluate the importance of embedding business ethics to achieve sustainability.</p>	<ul style="list-style-type: none"> <li>○ Moral Principles. Utilitarianism. Kantism. Libertinism. Expectancy Theory. Equity Theory.</li> <li>○ Impact of culture on (un)ethical behaviour. Reputational risk. Impact of unethical behaviour on share price and P&amp;L.</li> <li>○ Seeking guidance. Ethical code, Code of Conduct.</li> </ul>
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## Assessment

To achieve a 'pass' for this unit, learners must provide evidence to demonstrate that they have fulfilled all the learning outcomes and meet the standards specified by all assessment criteria.

Learning Outcomes to be met	Assessment Criteria to be covered	Assessment type	Word count (approx. length)
LO1 – LO5	All AC's under LO1 – LO5	Coursework	4,500 words

## Indicative Reading List

Bowie N. (2013) *Business Ethics in the 21st Century (Issues in Business Ethics Book 39) 3th Edition* ISBN 978-9400762220

Caradonna, J.L. (2016) *Sustainability: A History* ISBN 978-0190614478

Club of Rome (1972) *The limits to growth* Available online <https://archive.org/details/TheLimitsToGrowth>

Cohen, R. (2020) *Impact: Reshaping capitalism to drive real change* ISBN 978-1631955143

Hahn, R. (2022) *Sustainability Management: Global Perspectives on Concepts, Instruments, and Stakeholders* ISBN 978-3982321103

Kane, G. (2011) *The Green Executive: Corporate Leadership in a Low Carbon Economy* ISBN 978-1849713344

Polman, P. (2022) *Net Positive: How Courageous Companies Thrive by Giving More Than They Take* ISBN 978-1647824730

Robertson, M. (2021) *Sustainability Principles and Practice* ISBN 978-0367365219

World Commission on Environment and Development (1987) *Our Common Future* Available online:  
<https://sustainabledevelopment.un.org/content/documents/5987our-common-future.pdf>

Earth Overshoot Day: <https://overshoot.footprintnetwork.org/>

## **Additional Resources**

United Nations: <https://www.un.org/en/>

## Environmental Science and Energy Transition

Unit Reference Number	K/650/9705
Unit Title	Environmental Science and Energy Transition
Unit Level	7
Number of Credits	20
Total Qualification Time (TQT)	200 Hours
Guided Learning Hours (GLH)	100 Hours
Mandatory / Optional	Mandatory
Sector Subject Area (SSA)	3.4 Environmental conservation
Unit Grading Type	Pass / Fail

### Unit Aims

The aim of the module is for the students to understand the physical underpinnings of energy systems, development of alternatives to fossil fuels, both renewable and non-renewable and their dependence on energy storage and grid management. A particular focus of this unit is given to the sustainable technologies harvesting solar and wind energy. Students will also explore and review national and international policies and different pathways to reduction of carbon emissions from energy systems.

### Learning Outcomes, Assessment Criteria and Indicative Content

Learning Outcome – The learner will:	Assessment Criteria – The learner can:	Indicative Content
1. Understand the physics of the energy-related carbon cycle and its impact on temperature.	1.1 Identify and differentiate what we mean by Scope 1, 2 and 3 of the carbon footprint.  1.2 Describe the carbon cycle related to energy uses and the meaning of the term “Anthropocene”.  1.3 Explain how carbon footprinting differs from lifecycle assessment.	<ul style="list-style-type: none"> <li>Physical principles of energy technologies, the energy-related carbon cycle.</li> <li>Historic overview of energy use. With specific focus on indigenous energy sources and their re-introduction.</li> </ul>



	<p>1.4 Explain how to read key Intergovernmental Panel on Climate Change (IPCC) reports and apply the knowledge on a published report.</p> <p>1.5 Analyse the physical principles of energy technologies and how energy technologies were historically used.</p> <p>1.6 Analyse the work of the IPCC and its role in international efforts to tackle climate change.</p>	<ul style="list-style-type: none"> <li>● Brief history of coal and oil (to provide context and comparison with current developments particularly of renewables.)</li> </ul> <p>The point of this is to:</p> <ul style="list-style-type: none"> <li>○ A) appreciate old/indigenous technologies that may come back, revived, modernised.</li> <li>○ B) appreciate that the current energy systems didn't just appear mature, but they have been developing over time. Renewables are sometimes dismissed as "inefficient". Coal and oil also started as inefficient.</li> </ul> <ul style="list-style-type: none"> <li>● Introduction of Carbon footprint – the 3 different scopes and CO2-equivalent (CO2e, CO2eq)</li> <li>● Carbon budget. Outsourcing of carbon emissions.</li> <li>● The difference between carbon footprint and life cycle assessment (analysis)</li> </ul> <p>Climate Change</p> <ul style="list-style-type: none"> <li>○ Overview of Climate science and Warming projections</li> <li>○ Introduction to Intergovernmental Panel on Climate Change (IPCC). Exercise: understanding IPCC reports, specifically the technical and the policy report, what to look for, how to read charts in the reports.</li> <li>○ From Holocene to Anthropocene</li> </ul>
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<p>2. Understand the physical principles of harvesting renewable alternatives to fossil fuels and the technological and market developments within this area.</p>	<p>2.1 Explain the technological trends, market developments and physical principles of PV and concentrated solar power.</p> <p>2.2 Explain the technological trends, market developments and physical principles of onshore and offshore wind harvesting.</p> <p>2.3 Explain the technological trends, market developments and physical principles of hydroelectric power plants and wave and tidal energy harvesting</p> <p>2.4 Analyse the environmental impact of; onshore and offshore wind harvesting; hydroelectric plants; wave and tidal energy harvesting.</p> <p>2.5 Analyse the physical principles of harvesting geothermal energy and contemporary technological trends.</p> <p>2.6 Evaluate how the natural settings of a given country/region support or hinder the use and development of renewable energy harvesting technologies.</p>	<p>Renewable alternatives to fossil fuels:</p> <ul style="list-style-type: none"> <li>○ Solar (PV, concentrated)</li> <li>○ Wind (onshore, offshore)</li> <li>○ Hydropower (incl. wave and tidal)</li> <li>○ Geothermal</li> </ul> <ul style="list-style-type: none"> <li>● Physical principles, environmental impacts, developments in harvesting technology, development of markets incl. government intervention (where this is material) for every type of renewable alternatives.</li> <li>● Suitability of any of these technologies for a particular country or region. Geophysical requirements.</li> </ul> <p><i>NB: only fundamentals are needed in this Unit, Carbon accounting is covered in more detail in Unit 6 - Net Zero.</i></p>
<p>3. Understand the physical principles of non-renewable alternatives to fossil fuels, the political sensitivities of non-renewables and the technological, and market developments related to these sources of energy.</p>	<p>3.1 Discuss the physical principles of the Carbon Capture and Storage technology, its technological development, existing markets and ambitions of oil producing states and China.</p> <p>3.2 Explain the physical principles of using biomass (biofuel) and why biomass is sometimes considered a renewable energy source.</p> <p>3.3 Explain the physical principles of using nuclear power and storing nuclear waste, and its role in national energy security strategy for various countries.</p>	<p>Non-renewable alternatives to fossil fuels:</p> <ul style="list-style-type: none"> <li>○ Biomass/biofuel</li> <li>○ Nuclear incl. nuclear waste</li> <li>○ Hydrogen (green, blue, turquoise, etc.)</li> <li>○ Carbon capture and storage (“clean coal”, “clean oil”) Developments in Norway, Saudi Arabia and China.</li> <li>○ Physical principles, environmental impacts, developments in harvesting technology, development of markets incl. government intervention, for every type of non-renewable fuel.</li> </ul>

	<p>3.4 Explain the physical principles of hydrogen, the different “colours” of hydrogen and the technological risks related to hydrogen use.</p> <p>3.5 Critically analyse the environmental impact of biomass and nuclear energy and their political sensitivity.</p>	<ul style="list-style-type: none"> <li>• Political sensitivities particularly around biomass (deforestation) and nuclear (lack of social licence in some countries).</li> </ul>
<p>4. Understand the dependence of alternative energy sources on storage and grid management.</p>	<p>4.1 Outline the difference between a centralised and distributed grid.</p> <p>4.2 Compare the energy storage options for different types of renewable energy.</p> <p>4.3 Describe the importance of energy storage and grid management systems for energy transformation.</p> <p>4.4 Explain the importance of life cycle assessment in understanding of the environmental impact of lithium batteries.</p> <p>4.5 Analyse how a circular economy can be used to manage battery waste and shortage of rare raw materials.</p>	<p>Storage of energy:</p> <ul style="list-style-type: none"> <li>○ Energy storage for solar and wind.</li> <li>○ Hydrogen economy, role of hydropower as a virtual battery and other technological alternatives.</li> </ul> <ul style="list-style-type: none"> <li>• The role of nuclear energy in balancing the grid and ensuring energy security.</li> <li>• Environmental impact of lithium batteries (which is a controversial topic) explained using lifecycle analysis. Explore the circular economy as a waste management strategy.</li> <li>• Centralised vs distributed grid.</li> </ul> <p><i>NB: principles of Circular Economy and circular business models are covered in detail by Unit 3 - Sustainability as a business strategy.</i></p>
<p>5. Understand the trilemma of energy transformation and the need for national policies and international cooperation.</p>	<p>5.1 Assess national and international policies for fostering the dissemination of renewable energy technologies.</p> <p>5.2 Evaluate what is meant by the trilemma of energy transformation.</p>	<ul style="list-style-type: none"> <li>• The trilemma of energy transformation - sustainability, affordability, security.</li> </ul> <p>Importance of international collaboration:</p> <ul style="list-style-type: none"> <li>○ Political impact and challenges of transition networks. Example: project Desertec and why did it fail.</li> </ul>

	5.3 Critically assess the role of international collaboration as an enabler of energy transformation.	<ul style="list-style-type: none"> <li>○ European super grid, IPS/UPS in CIS (former USSR) etc.</li> <li>○ EU climate policy target and policy. National Renewable Energy Action Plan (UK NREAP).</li> <li>○ International policies for promoting renewable energies (UNFCCC-INDC.)</li> </ul>
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## Assessment

To achieve a 'pass' for this unit, learners must provide evidence to demonstrate that they have fulfilled all the learning outcomes and meet the standards specified by all assessment criteria.

Learning Outcomes to be met	Assessment Criteria to be covered	Assessment type	Word count (approx. length)
LO1 to LO5	All AC's under LO1 to LO5	Coursework	4,500 words

## Indicative Reading List

Everett, B., Peake, S., Warren, J. (2021) *Energy Systems and Sustainability: Power for a Sustainable Future* ISBN 978-0198767640

Morgan, T. (2016) *Life After Growth: How the Global Economy Really Works - And Why 200 Years of Growth Are Over* ISBN 978-0857195531

Quaschnig, V. (2016) *Understanding Renewable Energy Systems* ISBN 978-1138781962

Schernikau, L., Hayden Smith, W. (2022) *The Unpopular Truth about Electricity and the Future of Energy* ISBN 979-8362596620

Smil, V. (2018) *Energy and Civilization: A History* ISBN 978-0262536165

Hamouchene, H. (2023) *Desertec: What Went Wrong?* Available online <https://www.ecomena.org/desertec/>

Whiteman, G., Walker, B., Perego, P. (2013). *Planetary boundaries: Ecological foundations for corporate sustainability*, Journal of Management Studies, 50(2), 207-336.

The International Energy Agency: [www.iea.org](http://www.iea.org)

Global Wind Energy Council: <https://gwec.net>

## **Additional Resources**

Bloomberg NEF: <https://about.bnef.com/>

UNEP + GRID Arednal (comms): [www.grida.no](http://www.grida.no)

National Government websites (many have pathways of transformation and/or calculators)

## Environmental Management in Organisations

Unit Reference Number	M/650/9707
Unit Title	Environmental Management in Organisations
Unit Level	7
Number of Credits	20
Total Qualification Time (TQT)	200 Hours
Guided Learning Hours (GLH)	100 Hours
Mandatory / Optional	Mandatory
Sector Subject Area (SSA)	3.4 Environmental conservation
Unit Grading Type	Pass / Fail

### Unit Aims

Companies are increasingly required to manage and report their impact on the natural environment. The aim of the unit is for the students to understand what is meant by environmental aspects, how relevant aspects and issues are selected, measured and reported. The student will also gain an understanding of existing environmental management standards and will be able to discuss pros and cons of implementing an Environmental Management System.

### Learning Outcomes, Assessment Criteria and Indicative Content

Learning Outcome – The learner will:	Assessment Criteria – The learner can:	Indicative Content
1. Understand topics relevant for environmental management and the reasons why organisations should choose to manage them.	1.1 Define the context in which environmental management is undertaken.  1.2 Describe the most used environmental management standards at a fundamental level.  1.3 Explain the scientific principles and processes to environmental management problems.  1.4 Analyse why some areas of environmental impact are more concerning than others for an organisation.	Areas of environmental impact and management and why these should be a concern for organisations: <ul style="list-style-type: none"> <li>○ Climate change and its impact on sea levels.</li> <li>○ Risk of flooding risk, coastal hazard.</li> <li>○ Risk of draughts and water shortage.</li> <li>○ Air Pollution.</li> <li>○ Solid waste.</li> <li>○ Landfilling.</li> <li>○ Deforestation and biodiversity loss.</li> </ul>

		<ul style="list-style-type: none"> <li>○ Water pollution.</li> </ul> <p>This can be made specific to the region where this module is available, e.g. flooding is a material issue in the UK, draughts and lack of water is material in Spain, air pollution is material in parts of Asia, deforestation of the tropical forest in Central and South America etc.</p> <p>Introduction to environmental management (EM) in organisations:</p> <ul style="list-style-type: none"> <li>○ Environmental drivers for organisations.</li> <li>○ Why should organisations care about the environment?</li> <li>○ Policy makers' view</li> <li>○ Stakeholders' view.</li> </ul> <p>Overview of EM standards:</p> <ul style="list-style-type: none"> <li>○ ISO 14001:2015</li> <li>○ Green Dragon</li> <li>○ British Standard (BS) 8555</li> <li>○ BS EN ISO 14005</li> <li>○ EMAS Global</li> </ul> <p>Regional standards may be included depending on where the module will be delivered.</p>
<p>2. Understand environmental assessment and management tools and their advantages and disadvantages.</p>	<p>2.1 Describe how areas of environmental management are selected by organisations.</p> <p>2.2 Explain how commonly used environmental management and assessment tools are used by organisations.</p> <p>2.3 Analyse the purpose of an Environmental Management System (EMS).</p>	<p>Purpose of EMS</p> <ul style="list-style-type: none"> <li>○ Costs and benefits of implementing an EMS.</li> <li>○ Standards and guidelines.</li> <li>● Ways to identify and evaluate environmental aspects and environmental risks. Factors to consider and techniques to determine which ones are significant.</li> </ul>

	<p>2.4 Evaluate the advantages and disadvantages of commonly used environmental management and assessment tools.</p>	<ul style="list-style-type: none"> <li>● Relevant risk assessment standards and guidelines.</li> <li>● Controlling, checking and monitoring environmental performance.</li> <li>● Environmental audit, life cycle assessment, environmental impact assessment, footprinting.</li> </ul>
<p>3. Understand how to develop and deliver environmental performance improvement.</p>	<p>3.1 Explain how to conduct a post-project review to collect lessons learned from a range of stakeholders.</p> <p>3.2 Analyse how to develop a programme to improve environmental performance, and its key elements.</p> <p>3.3 Evaluate ways to improve an organisation’s environmental performance.</p> <p>3.4 Evaluate how to implement a programme to improve organisation’s environmental performance.</p>	<ul style="list-style-type: none"> <li>● The role of an EMS in assisting organisations to understand and reduce their ecological footprint.</li> <li>● Identifying areas for environmental improvement.</li> <li>● Financial metrics such as cost/benefit analysis, internal rate of return (IRR), and return on investment (ROI).</li> <li>● Environmental metrics typically include reduction of electricity usage, change in fuel consumption for company vehicles, carbon emissions reductions, gallons of water saved, and increased waste diversion.</li> <li>● Social metrics focus on employees and occupants, health &amp; wellbeing, diversity &amp; inclusion, supply chain management, and more.</li> <li>● Governance metrics are often determined by the existence of policies on a wide range of issues such as company values and business resilience plans.</li> <li>● Development of a good environmental policy.</li> </ul>



		<ul style="list-style-type: none"> <li>● Setting objectives and targets.</li> <li>● Main steps in developing an environmental improvement programme, including post-project review and lessons learned.</li> <li>● Principles of a cost-benefit analysis.</li> </ul>
<p>4. Understand approaches collection, analysis, reporting and communication of environmental data.</p>	<p>4.1 Identify relevant sources of environmental information and data.</p> <p>4.2 Describe suitable techniques for dissemination of findings.</p> <p>4.3 Explain the techniques used to collect, process, store and retrieve data.</p> <p>4.4 Explain the role of verification and assurance in an environmental project.</p> <p>4.5 Critically analyse and interpret environmental data to draw appropriate conclusions.</p>	<p>Organisational Scope:</p> <ul style="list-style-type: none"> <li>○ Supply Chain Scope.</li> <li>○ Product Scope.</li> <li>● Types of environmental information and relevant sources.</li> <li>● Absolute and Normalised data, Qualitative and Quantitative data.</li> <li>● Techniques to collect, process, store and retrieve data.</li> <li>● Techniques to analyse and interpret data and draw appropriate conclusions.</li> <li>● Overview of environmental data reporting standards.</li> </ul>

## Assessment

To achieve a 'pass' for this unit, learners must provide evidence to demonstrate that they have fulfilled all the learning outcomes and meet the standards specified by all assessment criteria.

Learning Outcomes to be met	Assessment Criteria to be covered	Assessment type	Word count (approx. length)
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All LO1 to LO4	All AC's under LO1 to LO4	Coursework	4,500 words
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## Indicative Reading List

Brady, Ebbage and Lunn (2011) Environmental Management in Organisations: the IEMA handbook. 2nd Edition. ISBN 1849710627.

DEFRA (2012) Evidence Based Study into the Benefits of Environmental Management Systems (EMSs) for Small and Medium Sized Enterprises (SMEs). <http://bit.ly/rzBNLw>

DEFRA, Environment Agency (2023) Develop a management system: environmental permits <https://www.gov.uk/guidance/develop-a-management-system-environmental-permits>

Hennig, J.C., Firk, S., Wolff, M., Coskun, H. (2023) Environmental management control systems: Exploring the economic motivation behind their implementation

Journal of Business Research, Volume 169, 2023, 114283, ISSN 0148-2963, <https://doi.org/10.1016/j.jbusres.2023.114283>, <https://www.sciencedirect.com/science/article/pii/S0148296323006422>

Poynton, S. (2017) Beyond Certification (DoShorts) ISBN 978-1910174531

Welford, R (2016) Corporate Environmental Management 1: Systems and Strategies. ISBN 978-1844079667

WRAP (2023) Analysis of challenges for environmental reporting at product & organisational level. <https://wrap.org.uk/resources/report/analysis-challenges-environmental-reporting-product-organisational-level>

## Additional Resources

ISO 14001 Family: <https://www.iso.org/standards/popular/iso-14000-family>

## Research Methods

Unit Reference Number	T/618/0798
Unit Title	Research Methods
Unit Level	7
Number of Credits	20
Total Qualification Time (TQT)	200 Hours
Guided Learning Hours (GLH)	100 Hours
Mandatory / Optional	Mandatory
Unit Grading Structure	Pass / Fail

## Unit Aims

The aim of this unit is to develop learners' ability to prepare for various types of academically based management research through the development and design of a research proposal. Learners will develop a critical understanding of the philosophical, practical and ethical concepts of research within the context of a relevant environment.

## Learning Outcomes, Assessment Criteria and Indicative contents

Learning Outcome – The learner will:	Assessment Criterion – The learner can:	Indicative contents
1. Be able to develop research approaches in a suitable context.	1.1 Appraise research problems.  1.2 Develop and justify appropriate research aims and objectives within a defined scope and timeframe.  1.3 Critically explore, select, and justify research approaches.	<ul style="list-style-type: none"> <li>Research problem identification: understanding the research context; research problem identification for investigation; research topic identification; the conceptualisation of a research problem; developing insights; feasibility and possibilities; the search for literatures; setting initial components e.g. working plan, research goals, time table and management, research process, monitoring, evaluation and revision.</li> </ul>
2. Be able to critically review literature on a business research topic.	2.1 Critically analyse different theoretical approaches to a research problem.  2.2 Create a structured and thorough critical literature review.	

<p>3. Be able to design business research methodologies.</p>	<p>3.1 Critically evaluate relevant research methodologies to reflect the research objectives.</p> <p>3.2 Design an appropriate methodology in terms of the research objectives for a defined population.</p> <p>3.3 Justify the methodology selected in terms of the research objectives within agreed ethical guidelines.</p>	<ul style="list-style-type: none"> <li>• Research problem selection and justification: rationale of the proposed research; appropriateness; reasons for selection of a specific research topic; skills, capacities and knowledge requirement identification; research question and hypothesis formulation; rationale elaboration; essential date setting; review and monitoring process.</li> </ul>
<p>4. Be able to develop a research proposal.</p>	<p>4.1 Create a research question, literature review and methodology.</p> <p>4.2 Propose techniques for use with quantitative and qualitative data collection and analysis.</p>	<ul style="list-style-type: none"> <li>• Develop appropriate research objectives and justification: background, aims and objectives selection; reasons for these selections; length of the research; skills, capacities and knowledge enhancement e.g. literature review, methodology, research type selection, data collection and analysis, drawing a successful conclusion; critical knowledge on appropriate research methods e.g. qualitative and quantitative, statistical research tools; research validity, reliability and ethical issues; critical justification of these selections.</li> <li>• Literature review as relevant to the research problem and objectives: definition, features and ways to do literature review; the generic selection of literature; spotting the sources of literature; justification of an appropriate selection of literature.</li> <li>• To compare different theories and authors: the selection of appropriate theories for the research; conceptualisation of the research phenomenon; including relevant theories and the justification of choices; the strength and credentials of relevant theoretical framework;</li> </ul>

		<p>the understanding and interpretation; developing the theoretical framework.</p> <ul style="list-style-type: none"> <li>● Critical review of the key literature for inclusion in a research proposal while focusing on concepts and methodologies followed by other: knowledge on acceptability, reliability and validity of literature; the reference style of literature; key literature type selection e.g. journals, books, papers, conference papers; source of literature: library searches, internet, both online and offline publication media.</li> <li>● Research methodologies and relationship with research objectives: advanced knowledge on research methodologies; action research; intervention research; non- intervention research.</li> <li>● Design and choose an appropriate methodology in terms of the research objectives: designing research using the most appropriate method; research question or hypothesis test; reliability and validity test; ethical and access issues consideration; quantitative methodology; questionnaire design and distribution; conducting interviews; surveys; qualitative methodology; interviews; observation; case studies.</li> <li>● Justify the methodology selected in terms of the research objectives: critical knowledge on questions on the questionnaire, interviewee selection, data verification, bias, time and place</li> </ul>
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		<p>selection, interview recording; justification of using any selected research tool.</p> <ul style="list-style-type: none"> <li>Evaluate and use techniques for use with quantitative and qualitative data: types of data presentation and analysis; qualitative data analysis e.g. techniques of categorisation and coding; transcripts interpretation, data analysis process, data analysis, data presentation, the use of information technologies, quantitative data analysis e.g. value analysis, coding, data analysis manually and electronically.</li> </ul>
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## Assessment

To achieve a pass for this unit, learners must achieve the learning outcomes and meet the standards specified by all assessment criteria.

Learning Outcomes to be met	Assessment Criteria to be covered	Assessment type	Word count (approx. length)
LO1 – LO4	All AC's under LO1 to LO4	Research Proposal	2500 words

## Indicative reading list

Anderson, V. (2009) *Research Methods in Human Resource Management*. London: Chartered Institute of Personnel and Development.

Binsardi, A. (2008) *Research Methods for Management*. Cambridge: International Academic Press.

Booth, A., Papaioannou, D. and Sutton, A. (2012) *Systematic Approaches to a Successful Literature Review*. London: Sage Publications.

Bryman, A. and Bell, E. (2011) *Business Research Methods*. New York: Oxford University Press.

- Burns, R. P. and Burns, R. (2008) *Business Research Methods & Statistics Using SPSS*. London: Sage Publications.
- Cameron, S. (2005) *The MBA Handbook*. Harlow: Prentice Hall.
- Cooper, D. R. and Schindler, P. S. (2006) *Business Research Methods*. Boston: McGraw Hill.
- Deniels, P. and Becker, L. (2012) *Developing Research Proposals*. London: Sage Publications.
- Denscombe, M. (2007) *The Good Research Guide*. Maidenhead: Open University Press.
- Easterby-Smith, M., Thorpe, R. and Jackson, P. (2012) *Management Research*. London: Sage Publications.
- Fink, A. (2009) *Conducting Research Literature Reviews*. London: Sage Publications. Flick, U. (2011) *Your Research Project*. London: Sage Publications.
- Gill, J. and Johnson, P. (2010) *Research Methods for Managers*. London: Sage Publications. Jankowicz, A. D. (2005). *Business Research Projects*. London: Thomson Learning.
- Jesson, J. K., Matheson, L. and Lacey, F. M. (2011) *Doing Your Literature Review*. London: Sage Publications.
- Keleman, M. L. and Rumens, N. (2008). *An Introduction to Critical Management Research*. London: Sage Publications.
- Malhatra, N. K. (2007) *Marketing Research: An Applied Orientation*. New Jersey: Pearson.
- McNiff, J. and Whitehead, J. (2009) *Doing and Writing Action Research*. London: Sage Publications.
- Moutinho, L. and Hutcheson, G. D. (2011) *The Sage Dictionary of Quantitative Management Research*. London: Sage Publications.
- Robson, C. (2002) *Real World Research*. Hampshire: John Wiley and Sons.
- Saunders, M., Lewis, P. and Thornhill, A. (2019) *Research Methods for Business Learners*. Harlow: Prentice Hall.
- Thomas, R. and Lynn, P. (2009) *Survey Research in Practice*. London: Sage Publications.

## **Additional Resources**

Journal of Mixed Methods Research

Journal of Advances in Management Research

Management Research Review

Organisational Research Methods

Qualitative Inquiry

Qualitative Research

Qualitative Research in Organisations and Management: An International Journal

<http://managementhelp.org>

<http://www.referenceforbusiness.com>



## Delivering Transformational Change

Unit Reference Number	R/650/9708
Unit Title	Delivering Transformational Change
Unit Level	7
Number of Credits	20
Total Qualification Time (TQT)	200 Hours
Guided Learning Hours (GLH)	100 Hours
Mandatory / Optional	Optional
Sector Subject Area (SSA)	3.4 Environmental conservation
Unit Grading Type	Pass / Fail

### Unit Aims

Climate change is referred to as a “wicked challenge”. Global in reach, intergenerational in impact and a change that requires transformation or mature social and economic systems. This unit introduces students to; the tools, techniques and approaches which can be used to deliver a transformational change on a large scale; the role of materiality assessment; how individual and organisational respond to change; how continuous change, realistic expectations and engagement of stakeholders minimises resistance; and the importance of leaders’ behaviour for success.

### Learning Outcomes, Assessment Criteria and Indicative Content

Learning Outcome – The learner will:	Assessment Criteria – The learner can:	Indicative Content
1. Understand how to conduct a materiality assessment to understand priorities for change and change readiness.	<p>1.1 Identify similarities and differences of materiality between industries.</p> <p>1.2 Describe how to conduct a materiality assessment in the context of a specific company and its specific needs and characteristics.</p> <p>1.3 Explain the external and internal drivers for change, specifically those related to climate change and sustainability.</p>	<p>External drivers for change:</p> <ul style="list-style-type: none"> <li>○ Changes in the natural environment (climate change, biodiversity.)</li> <li>○ Regulation.</li> <li>○ Globalisation.</li> <li>○ Technological change.</li> <li>○ Change in market sentiment etc.</li> </ul> <p>Internal drivers for change:</p>

	<p>1.4 Critically analyse how material issues present risks, opportunities, and drivers for change to organisations.</p>	<ul style="list-style-type: none"> <li>○ Strategic choices of a company (organisation's capabilities, processes, pressure of internal stakeholders etc.)</li> </ul> <p>Conducting materiality assessment:</p> <ul style="list-style-type: none"> <li>○ Best practices in stakeholder engagement for the purposes of materiality assessment.</li> <li>● Materiality assessment to prioritise change drivers and benefits.</li> <li>● Definition of materiality assessment. SASB vs GRI view of materiality.</li> <li>● Examples of materiality in different industries. Similarities and differences.</li> </ul>
<p>2. Understand key techniques, practices, behaviours, and knowledge of change management.</p>	<p>2.1 Describe the need for change management in organisations and the key roles enabling and facilitating transformational change.</p> <p>2.2 Explain why stakeholder engagement and effective, collaborative communication is a necessary condition of change success.</p> <p>2.3 Analyse how organisations prepare for change.</p> <p>2.4 Analyse how fundamental change management models can be used to deliver change more effectively.</p> <p>2.5 Evaluate the five levels of sustainability maturity and continuous change as the most successful approach to transformational change.</p>	<ul style="list-style-type: none"> <li>● The need for change management.</li> <li>● Transformational change must be managed.</li> <li>● Key roles in organisational change.</li> <li>● Sustainability maturity and the Demming (PDCA) cycle.</li> </ul> <p>Change readiness:</p> <ul style="list-style-type: none"> <li>○ Motivation</li> <li>○ Planning for resistance.</li> <li>○ Measuring effectiveness of change.</li> </ul> <p>Change management models:</p>

		<ul style="list-style-type: none"> <li>○ The Kubler-Ross change curve (individual response to change)</li> <li>○ Lewin change model</li> <li>○ The Learning cycle (from unconsciously incompetent to consciously competent).</li> <li>○ Learning theory and skills development.</li> <li>○ Motivators (Maslow) vs hygiene factors (Herzberg).</li> </ul> <ul style="list-style-type: none"> <li>● The importance of stakeholder communication and engagement.</li> <li>● Negotiation for a win, win.</li> <li>● The need of an engaged change sponsor as an enabler of transformational change.</li> </ul> <p><i>NB: stakeholder assessment and methods of stakeholder engagement are covered in Unit 3 - Sustainability as a business strategy.</i></p>
<p>3. Understand the behaviour of complex systems and how to change them.</p>	<p>3.1 Identify examples of complex systems in organisations and society.</p> <p>3.2 Describe the idea of a system: stock, flow, feedback loops and emerging properties of a system.</p> <p>3.3 Analyse how systems intervention can be used to accelerate and sustain change within organisations, include, messy and problematic situations and complex systems.</p>	<ul style="list-style-type: none"> <li>● System structure and behaviour.</li> <li>● Stock, flow, buffers, feedback loops (reinforcing, balancing), system boundaries.</li> <li>● System’s purpose. Emerging properties of systems. Unintended consequences</li> <li>● Transformation of complex systems</li> <li>● 12 levers of transformation (points of intervention.)</li> </ul>

		<ul style="list-style-type: none"> <li>• Wheel of change (Doppelt 7-step model.)</li> </ul>
<p>4. Understand how a leader’s style and approach has a major impact on both team and individual performance, values, and motivations.</p>	<p>4.1 Assess how to effectively lead diverse teams.</p> <p>4.2 Analyse the leadership needs of an organisation, considering internal and external contexts.</p> <p>4.3 Critically assess how key leadership theories impact on management and motivation of people in the workplace.</p>	<p>Types of Leadership:</p> <ul style="list-style-type: none"> <li>○ Transformational Leadership.</li> <li>○ Charismatic leadership. “Hero CEO.”</li> <li>○ Servant Leadership</li> <li>○ Connective Leadership (Lipman-Blumen.)</li> </ul> <ul style="list-style-type: none"> <li>• Definition(s) of leadership.</li> <li>• The Continuum of Leadership Styles (Tannenbaum, Schmidt.)</li> <li>• Contingency Theory. Culture as a contingent factor.</li> <li>• Leading diverse teams (how to work constructively with the multiple different perspectives brought by individual team members.)</li> <li>• Leadership Competency Framework.</li> </ul>
<p>5. Understand the meaning and purpose of ESG Governance Structure and how to develop it.</p>	<p>5.1 Describe the definition and purpose of ESG Governance Structure.</p> <p>5.2 Identify key roles and functions involved in ESG governance.</p> <p>5.3 Explain the key steps in setting up an internal ESG governance structure, including governing documents.</p>	<p>ESG Governance Structure (i.e. the management structure overseeing ESG):</p> <ul style="list-style-type: none"> <li>○ Why is it needed?</li> <li>○ Roles and functions.</li> <li>○ Governing documents (ESG governance charter.)</li> <li>○ Different approaches to ESG governance.</li> </ul> <p>Key Steps in developing ESG Governance:</p> <ul style="list-style-type: none"> <li>○ Structure in public companies, private companies, and SMEs.</li> </ul>

## Assessment

To achieve a 'pass' for this unit, learners must provide evidence to demonstrate that they have fulfilled all the learning outcomes and meet the standards specified by all assessment criteria.

Learning Outcomes to be met	Assessment Criteria to be covered	Assessment type	Word count (approx. length)
LO1 – LO5	All AC's under LO1 – LO5	Coursework	Essay 3,000 words (80%)
LO1 – LO5	All AC's under LO1 – LO5	Coursework	Presentation and 800 words of speaker notes (20%)

## Indicative Reading List

David Buchanan, D., Huczynski, A. (2019) *Organizational Behaviour*. ISBN 978-1292251578

Cameron, E., Green, M. (2019) *Making Sense of Change Management: A Complete Guide to the Models, Tools and Techniques of Organizational Change*. ISBN 978-0749496975

Doppelt, B. (2009). *Leading Change Toward Sustainability: A Change-Management Guide for Business, Government and Civil Society*. Routledge; 2nd edition. ISBN 978-1906093341

Lipman-Blumen, J. (2000) *Connective Leadership: Managing in a Changing World*. ISBN 978-0195134698

Mackie, D. (Editor) (2023) *The Handbook of Climate Change Leadership in Organisations: Developing Leadership for the Age of Sustainability*. ISBN 978-1032380056

Meadows, D. (2017) *Thinking in Systems: A Primer*. Chelsea Green Publishing. ISBN 978-1603580557.

The Open University (2019). *Working in diverse teams*. The Open University. Kindle Edition. ASIN B082Y5X1Q7

## **Additional Resources**

Change Management Institute: <https://change-management-institute.com/>

## Advanced Principles of Net Zero

Unit Reference Number	T/650/9709
Unit Title	Advanced Principles of Net Zero
Unit Level	7
Number of Credits	20
Total Qualification Time (TQT)	200 Hours
Guided Learning Hours (GLH)	100 Hours
Mandatory / Optional	Optional
Sector Subject Area (SSA)	3.4 Environmental conservation
Unit Grading Type	Pass / Fail

### Unit Aims

COP26 has brought the Net Zero initiative on the agenda of governments. An increasing number of governments are pledging legally binding net zero targets. The aim of this unit is to enable students to understand what net zero is, how it differs from carbon neutrality and why the net zero agenda is approached with such high urgency. Students will gain a fundamental knowledge of; Greenhouse Gas Accounting; the concept of science-based targets and its application across different industries; and the extent businesses and society can adapt to climate change and what challenges they may expect.

### Learning Outcomes, Assessment Criteria and Indicative Content

Learning Outcome – The learner will:	Assessment Criteria – The learner can:	Indicative Content
1. Understand the meaning and importance of “net zero” at a conceptual level.	<p>1.1 Define net zero and carbon neutrality in context of the Paris Accord.</p> <p>1.2 Identify national and international drives, commitments and initiatives driving responses to the climate crisis and the net zero agenda.</p> <p>1.3 Explain the urgency of the net zero agenda, using climate science and climate scenarios.</p>	<p>National targets and commitments:</p> <ul style="list-style-type: none"> <li>○ UK example.</li> <li>○ EU example.</li> <li>○ Rest of the world example.</li> </ul> <p>International initiatives:</p> <ul style="list-style-type: none"> <li>○ GFANZ</li> </ul>

	<p>1.4 Critically analyse the differences between net zero and carbon neutral, and their implication for organisations.</p>	<ul style="list-style-type: none"> <li>○ UNFCCC Race to Zero Campaign.</li> <li>● COP 21, the Paris Accord and the importance of 1.5°C.</li> <li>● The meaning and the need for net zero/the anthropogenic net-zero balance.</li> <li>● Net zero vs carbon neutrality. Examples of carbon offsets and carbon removals.</li> </ul>
<p>2. Understand the application of the fundamentals of Greenhouse Gas (GHG) Accounting.</p>	<p>2.1 Identify Scope 1, 2 and 3 GHG emissions.</p> <p>2.2 Define GHG accounting and its importance to corporations and their stakeholders.</p> <p>2.3 Explain how to establish a greenhouse gas inventory across Scope 1, 2 and 3.</p> <p>2.4 Calculate corporate GHG emissions and perform basic calculations.</p> <p>2.5 Analyse the connection between GHG emissions, global warming, and climate risks.</p>	<ul style="list-style-type: none"> <li>● The Science Behind GHG Accounting.</li> <li>● Commonly used standards for compiling a greenhouse gas inventory.</li> <li>● Benefits and challenges of measuring carbon in business operations, products, and value chain. Stakeholder Pressure on GHG reporting.</li> <li>● Best Practices from GHG Protocol (Relevance, Consistency, Transparency, Accuracy, Completeness.)</li> <li>● Calculating greenhouse gas emissions within an inventory (Scope 1, 2, 3) using activity data and emission factors.</li> <li>● Defining Operational &amp; Legal Boundaries.</li> <li>● Implications on corporate profitability.</li> </ul>



<p>3. Understand science-based targets and their facilitating role to deliver net zero.</p>	<p>3.1 Outline steps to develop a decarbonisation plan and establish short, medium, and long term targets.</p> <p>3.2 Explain what is meant by science-based targets and how science-based targets can be established by an organisation.</p> <p>3.3 Assess how to reduce Scope 3 GHG emissions.</p> <p>3.4 Analyse the challenges of decarbonisation, including carbon bubbles, stranded assets and challenges to adaptation to climate change.</p>	<p>Science-Based Targets initiative (SBTi):</p> <ul style="list-style-type: none"> <li>○ SBTi pathways and methodologies</li> <li>○ SBTi Net Zero Corporate Standard</li> <li>○ Decarbonising industry sectors using SBTi guidelines.</li> </ul> <p>Developing a decarbonisation plan:</p> <ul style="list-style-type: none"> <li>○ What should be in a decarbonisation plan?</li> <li>○ Actions in the short term.</li> <li>○ Actions in the medium-longer term.</li> <li>○ Net zero across the value chain</li> <li>○ The MacKay Carbon Calculator - a model of the UK energy system that explores pathways to net zero by 2050.</li> </ul> <p>Challenges of decarbonisation:</p> <ul style="list-style-type: none"> <li>○ Challenges to mitigation, challenge of Scope 3 emissions.</li> <li>○ Risk of double counting.</li> <li>○ Carbon bubble.</li> <li>○ Stranded assets.</li> </ul>
<p>4. Understand how to communicate an organisation's response to climate change, net zero pledges and green claims.</p>	<p>4.1 Classify existing standards and regulations of environmental communication.</p> <p>4.2 Describe how a robust green or net zero pledge can be developed in an organisation.</p> <p>4.4 Explain the meaning of greenwashing and what risks greenwashing poses to organisations.</p> <p>4.4 Critically assess the risks and opportunities of net zero on future business viability, reputation, and supply chain.</p>	<p>Developing a net zero pledge:</p> <ul style="list-style-type: none"> <li>○ Understanding the internal capacity to deliver net zero.</li> <li>○ Risks and opportunities.</li> <li>○ Realistic goals and timescales.</li> <li>○ Meaning and examples of greenwashing. Legal and reputational risks.</li> </ul> <p>Standards and regulations of environmental communications:</p>

		<ul style="list-style-type: none"> <li>○ Environmental claims rules by the ASA, CAP and BCAP.</li> <li>○ Green claim codes by the Competition and Market Authority, UK governmental organisation.</li> <li>○ ICC Framework for Responsible Environmental Marketing and Communications.</li> <li>○ ISO 14063:2020 (Environmental communication.)</li> </ul>
<p>5. Understand how and to which extent organisations and society can adapt to climate change.</p>	<p>5.1 Identify trends in technological innovations related to CC adaptation.</p> <p>5.2 Describe why adaptation is not always possible owing to geographical, cultural and political barriers.</p> <p>5.3 Assess the impact and limitations of technological innovations related to CC adaptation.</p> <p>5.4 Explain the risks and vulnerabilities of climate change (CC) for organisations, environment and the society and the meaning of CC resilience.</p> <p>5.5 Critically analyse mechanisms of financing CC adaptation, including international agreements.</p> <p>5.6 Evaluate geoengineering including trends in geoengineering, its impacts and risks.</p>	<p>Living with climate change:</p> <ul style="list-style-type: none"> <li>○ Risks and vulnerabilities brought by CC on to environment, society, and organisations.</li> <li>○ The meaning of climate resilience.</li> <li>○ Geographical barriers to adaptation.</li> <li>○ Technological innovations enabling adaptation and increased resilience.</li> <li>○ Limitations of technology.</li> <li>○ Cultural, social, and political challenges to adaptation.</li> <li>○ Selection of case studies to illustrate possibilities and limitations of adaptation (e.g. cities, coastal communities, vulnerable countries etc.)</li> </ul> <ul style="list-style-type: none"> <li>● Financing adaptation. Conclusions of COP28.</li> <li>● Developments in geoengineering. Risks and impacts of the proposed solutions.</li> </ul>

## Assessment

To achieve a ‘pass’ for this unit, learners must provide evidence to demonstrate that they have fulfilled all the learning outcomes and meet the standards specified by all assessment criteria.

Learning Outcomes to be met	Assessment Criteria to be covered	Assessment type	Word count (approx. length)
LO1, LO4 and LO5	All ACs under LO1, LO4 and LO5	Coursework	2500 words
LO2 and LO3	All AC's under LO2 and LO3	Coursework	2000 words

## Indicative Reading List

Hampshire-Waugh, M. (2021) *Climate Change and the Road to Net-Zero: Science, Technology, Economics, Politics*. ISBN 978-1527287969

Helm, D. (2021) *Net Zero: How We Stop Causing Climate Change*. ISBN 978-0008404499

IPCC 6th Assessment Report (AR6) *Climate Change 2021: The Physical Science Basis*. Available online <https://www.ipcc.ch/assessment-report/ar6/>

ISO 14064 *Specification with guidance at the organisational level for quantification and reporting of greenhouse gas emissions and removals*. Available online <https://www.iso.org/standard/66453.html>

Race to Net Zero (2021) *Get Net Zero Right: A how-to guide*. Available online <https://racetozero.unfccc.int/heres-how-we-get-net-zero-right/>

World Business Council for Sustainable Development (2022) *Incentives for Scope 3 supply chain decarbonization: accelerating implementation*. Available online <https://www.wbcsd.org/Programs/Climate-and-Energy/Climate/SOS-1.5/Resources/Incentives-for-Scope-3-supply-chain-decarbonization-accelerating-implementation>

World Resources Institute (2020) *Designing and Communicating Net-Zero Targets*. Available online <https://www.wri.org/research/designing-and-communicating-net-zero-targets>

## Additional Resources

Carbon Trust: <https://www.carbontrust.com/en-eu>

Greenhouse Gas Protocol Corporate Standard. <https://ghgprotocol.org/corporate-standard>

SBTi: <https://sciencebasedtargets.org/>

The MacKay Carbon Calculator (a model of the UK energy system): <https://www.gov.uk/guidance/carbon-calculator>

## Environmental Politics and Policies

Unit Reference Number	D/650/9710
Unit Title	Environmental Politics and Policies
Unit Level	7
Number of Credits	20
Total Qualification Time (TQT)	200 Hours
Guided Learning Hours (GLH)	100 Hours
Mandatory / Optional	Optional
Sector Subject Area (SSA)	3.4 Environmental conservation
Unit Grading Type	Pass / Fail

### Unit Aims

Many environmental and social challenges of today are characterised by debate and disagreement about how the state, businesses and the civil society should contribute to solving them. This unit provides students with the opportunity to explore the role of law, policy, and governance in tackling issues of climate change and unsustainability, and addressing the interplay between governments, businesses and civil society. In addition, the unit also explores in detail; the instruments (legal, economic, suasive) that exist to deliver change, and what their impact is in the real world; the importance of ethics in international negotiations, considering climate change as a moral issue; and, the work of the United Nations as the key supranational organisation for sustainable development.

### Learning Outcomes, Assessment Criteria and Indicative Content

Learning Outcome – The learner will:	Assessment Criteria – The learner can:	Indicative Content
1. Understand principles and examples of environmental policy and legislation.	1.1 Identify key environmental legislations related to sustainability in the UK.  1.2 Evaluate key environmental policies that impact UK businesses.  1.3 Describe the penalties for non-compliance with environmental legislation.	Examples of significant legislation: <ul style="list-style-type: none"> <li>○ Pollution.</li> <li>○ Waste, contaminated land.</li> <li>○ Climate Change.</li> <li>○ Water pollution.</li> <li>○ Air pollution.</li> </ul>

	<p>1.4 Explain key principles, theories, current issues and research related to environmental policy.</p> <p>1.5 Analyse the interactions between environmental and social issues.</p>	<p>Key principles of environmental policy:</p> <ul style="list-style-type: none"> <li>○ Rio principles.</li> <li>○ Polluter pays.</li> <li>○ Precautionary principle.</li> <li>○ Producer responsibility.</li> <li>○ Life Cycle thinking.</li> <li>○ Best Available Techniques (BAT.)</li> <li>○ Environmental policy cycle.</li> </ul> <ul style="list-style-type: none"> <li>● Law vs Policy. Legislative and judicial sources of law. Common law.</li> <li>● Environmental law and Environmental policy. Definition, differences between the two.</li> </ul>
<p>2. Understand the role of ethics in international climate agreements and governance.</p>	<p>2.1 Identify examples of climate litigation and their impact.</p> <p>2.2 Explain the principles underpinning ethics of climate change agreements.</p> <p>2.3 Explain the approaches to the allocation of the carbon budget and the moral relevance of climate change.</p> <p>2.4 Evaluate the definition of Governance in sustainability context.</p> <p>2.5 Evaluate the importance of civic environmentalism for tackling climate issues.</p>	<p>Ethics in international agreements:</p> <ul style="list-style-type: none"> <li>○ Oslo Principles.</li> <li>○ The just transition.</li> <li>○ Scientific uncertainty.</li> </ul> <p>Approaches to carbon budget allocation:</p> <ul style="list-style-type: none"> <li>○ Past and future emissions.</li> <li>○ Egalitarian principles.</li> <li>○ Prioritarian principles.</li> <li>○ Sufficentarian principle.</li> <li>○ Grandfathering.</li> </ul> <ul style="list-style-type: none"> <li>● The “G” in ESG.</li> </ul>

		<ul style="list-style-type: none"> <li>● Definitions of governance.</li> <li>● Ethics and Governance.</li> <li>● Perception of climate change as a moral issue.</li> <li>● Civic environmentalism. Climate litigation.</li> </ul> <p><i>NB: Introduction to business ethics is covered in Unit 1 – Fundamentals of sustainability.</i></p>
<p>3. Understand economic instruments available to effect change related to environmental and social issues.</p>	<p>3.1 Explain the strengths and weaknesses of economic policy instruments to effect change.</p> <p>3.2 Critically analyse the main economic policy instruments available to effect change of behaviour to tackle environmental and social issues.</p>	<p>Economic considerations:</p> <ul style="list-style-type: none"> <li>○ Price-based instruments.</li> <li>○ Quantity-based instruments.</li> <li>○ Charges.</li> <li>○ Deposit-refund schemes.</li> <li>○ Strengths and weaknesses for each group.</li> </ul> <p><i>NB: Carbon markets and Emission trading systems are covered in Unit 8 – Sustainable finance. In this module, they should be covered from a legal and policy perspective rather than a financial perspective.</i></p>
<p>4. Understand suasive instruments available to effect change related to environmental and social issues.</p>	<p>4.1 Identify examples of the most used suasive instruments and related controversies.</p> <p>4.2 Describe the main suasive instruments available to effect change of behaviour to tackle environmental and social issues.</p> <p>4.3 Analyse the strengths and weaknesses of suasive instruments to effect change.</p>	<p>Suasive Instruments (Suasive instruments mean voluntary restriction - “market friction” or “self-regulation”).</p> <ul style="list-style-type: none"> <li>○ Labels.</li> <li>○ Certifications.</li> <li>○ Award schemes codes of best practice.</li> <li>○ Voluntary agreements.</li> <li>○ Voluntary reporting.</li> </ul>

		<ul style="list-style-type: none"> <li>○ Strengths and weaknesses of suasive instruments.</li> <li>○ Controversies related to some of the labels (e.g. Fairtrade.)</li> <li>● The difference between free trade and fair trade.</li> </ul>
5. Understand key international agreements related to environmental governance and climate change politics.	<p>5.1 Outline the United Nations (UN) bodies that deal with sustainability.</p> <p>5.2 Identify examples of other initiatives, organisations or partnerships aiming to tackle climate change and unsustainability at a global level.</p> <p>5.3 Explain the role of the UN as a facilitator of international collaboration for sustainable development.</p> <p>5.4 Explain the role and meaning of COPs, related to both climate change and biodiversity.</p> <p>5.5 Analyse the purpose and impact of the key COP agreements.</p>	<p>United Nations:</p> <ul style="list-style-type: none"> <li>○ The role and structure of the UN.</li> <li>○ UN agencies and their role.</li> <li>○ UNEP FI.</li> <li>○ UNEP Global Compact.</li> </ul> <p>Conference of the Parties:</p> <ul style="list-style-type: none"> <li>○ COPs, UNFCCC: Rio, Kyoto, Paris, Glasgow, Dubai.</li> <li>○ COPs, Biodiversity convention. Kunming-Montreal.</li> <li>● Oil and Gas Climate Initiative (OGCI).</li> <li>● World Business Council For Sustainable Development (WBCSD)</li> </ul> <p><i>NB: IPCC should be mentioned but not in detail. The role and work of IPCC is already covered by Unit 2 - Environmental science and energy transition.</i></p>
6. Understand the UN Sustainable Development Goals (SDG) and the importance of the sustainability agenda.	6.1 Discuss the UN SDG's and the sustainability agenda and their role in transition to sustainability and global human development.	<p>UN SDGs:</p> <ul style="list-style-type: none"> <li>○ Targets.</li> <li>○ KPIs.</li> </ul>



	<p>6.2 Critically analyse the limitations of the most used indicator of progress – GDP.</p> <p>6.3 Evaluate existing alternatives to Gross Domestic Product (GDP.)</p>	<ul style="list-style-type: none"> <li>○ Examples and case studies.</li> </ul> <p>GDP:</p> <ul style="list-style-type: none"> <li>○ Understand the creation of GDP in the historical context.</li> <li>○ High-level overview of how GDP is calculated (3 approaches).</li> <li>○ Limitations to GDP and consumption as an indicator of progress.</li> </ul> <p>Alternatives and complements to GDP:</p> <ul style="list-style-type: none"> <li>○ Social Progress Index.</li> <li>○ Human Development Index Etc.</li> </ul>
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## Assessment

To achieve a ‘pass’ for this unit, learners must provide evidence to demonstrate that they have fulfilled all the learning outcomes and meet the standards specified by all assessment criteria.

Learning Outcomes to be met	Assessment Criteria to be covered	Assessment type	Word count (approx. length)
LO1, LO2, LO5 and LO6	All AC's under LO1, LO2, LO5 and LO6	Coursework	2,500 words(60%)
LO3, LO4	All AC's under LO3 and LO4	Coursework	2,000 words (40%)

## Indicative Reading List

Acemoglu D. and Robinson J.A. (2013). *Economics versus politics: pitfalls of policy advice*. Journal of Economic Perspectives. 27, 2:173–92.  
 Available online: <https://app.box.com/s/yxagv3cxclzn3pckqczo7vp85ww5rpvd>

Caballero, P., Londoño, P. (2022) *Redefining Development: The Extraordinary Genesis of the Sustainable Development Goals (The Policy and Practice of Governance)* ISBN 978-1955055260

Mutty , M. (2022) *Ethics And Global Climate Change: A Different Perspective On Climate Change* ISBN 979-8796149553

Roberts, J. (2010) *Environmental Policy*. 2nd Edition. Routledge Introductions to Environment: Environment and Society Texts. ISBN 978-0415497855

Sands, P. et al. (2018) *Principles of International Environmental Law*. 4<sup>th</sup> edition. ISBN 978-1108431125

Solomon, J. (2020) *Corporate Governance and Accountability*, 5th Edition ISBN 978-1119561200

Strandenaes, J.G. (2014) *Participatory democracy - HLPF laying the basis for sustainable development governance in the 21st Century*. Available online

<https://sustainabledevelopment.un.org/content/documents/3682The%20High%20Level%20Political%20Forum,%20major%20groups%20and%20modalities.pdf>

Zacca, E. (Editor) (2007) *Sustainable Consumption, Ecology and Fair Trade*. Environmental Politics / Routledge Research in Environmental Politics. ISBN 978-0415479752

## **Additional Resources**

Castle Debates: <https://www.castledebates.org.uk/>

United Nations: <https://www.un.org/en/>

UN SDGs: <https://sdgs.un.org/goals>



## Sustainable Finance

Unit Reference Number	K/650/9723
Unit Title	Sustainable Finance
Unit Level	7
Number of Credits	20
Total Qualification Time (TQT)	200 Hours
Guided Learning Hours (GLH)	100 Hours
Mandatory / Optional	Optional
Sector Subject Area (SSA)	3.4 Environmental conservation
Unit Grading Type	Pass / Fail

### Unit Aims

The Financial Services industry is arguably the most important when it comes to sustainability transformation. Through the course of this unit, students will explore why banking and finance is at the heart of the sustainability efforts, what sustainability means for financial services and why the industry prefers using the term “ESG” rather than “sustainability”. The unit also provides students with knowledge of risks stemming from climate change and loss of biodiversity; the current trends in the regulatory environment and existing or emerging disclosure frameworks; what financial products and activities are covered by the umbrella term “sustainable finance”; and the emerging ESG ratings and their relevance to both corporate and retail investors.

### Learning Outcomes, Assessment Criteria and Indicative Content

Learning Outcome – The learner will:	Assessment Criteria – The learner can:	Indicative Content
1. Understand the relevance of the Financial Industry to sustainability across different financial instruments and asset classes.	1.1 Identify existing trends and developments within the financial industry, related to sustainability.  1.2 Outline the ecosystem of ESG finance.  1.3 Explain the role and structure of financial institutions and the financial services industry.	Importance of the Financial Services industry for sustainability: <ul style="list-style-type: none"> <li>○ Why are financial firms different?</li> <li>○ A bank’s role as financial intermediary.</li> <li>○ Wholesale funding - capital markets, interbank markets.</li> <li>○ Loans vs bonds vs shares.</li> <li>○ Lending to SMEs.</li> <li>○ Asset management</li> </ul>

	<p>1.4 Analyse how the Financial Services industry facilitates sustainable commercial activities.</p> <p>-</p>	<ul style="list-style-type: none"> <li>○ Passive investments, ETFs</li> </ul> <p>Sustainability in Financial Services:</p> <ul style="list-style-type: none"> <li>○ The meaning of ESG.</li> <li>○ Accounting for sustainability.</li> <li>○ Sustainable Stock Exchanges (SSE) initiative.</li> <li>○ Development Banks.</li> <li>○ Sustainable Banking Network.</li> </ul>
<p>2. Understand how physical and transition risks, particularly those related to climate change, translate to financial risks and how this is managed by financial organisations and central banks.</p>	<p>2.1 Identify different types of regulatory instruments and their use.</p> <p>2.2 Describe the role of Central Banks and the regulatory environment surrounding sustainable finance.</p> <p>2.3 Explain the meaning of “sustainable finance” using the existing taxonomy.</p> <p>2.4 Assess why sustainable finance is of interest to lenders and borrowers.</p> <p>2.5 Critically examine the range of risks to which financial organisations are exposed in a sustainable finance context.</p>	<p>Risks in Financial Services related to sustainability.</p> <ul style="list-style-type: none"> <li>○ Why is climate change relevant for investors? <ul style="list-style-type: none"> <li>▪ Physical risks.</li> <li>▪ Transition risks.</li> <li>▪ Legal risks.</li> <li>▪ Stranded assets</li> </ul> </li> <li>○ Central banking and climate change</li> <li>○ Climate scenarios. NFGFS scenarios.</li> </ul> <p>Disclosure Frameworks:</p> <ul style="list-style-type: none"> <li>○ Purposes of financial regulation.</li> <li>○ EU taxonomy.</li> <li>○ TCFD</li> <li>○ TNFD</li> <li>○ SFDR</li> <li>○ CDP</li> <li>○ GRI</li> <li>○ Equator Principles (EPs).</li> <li>○ Principles for Responsible Investment (PRI).</li> <li>○ Principles for Responsible Banking (PRI).</li> <li>○ UN Global Compact.</li> </ul>

<p>3. Understand sustainable / ESG financing strategies and products that facilitate sustainable transition and development.</p>	<p>3.1 Identify key stakeholders in sustainable markets and their preferred use of capital.</p> <p>3.2 Categorise the range of sustainable financial products and activities covered by the umbrella term “sustainable finance”.</p> <p>3.3 Describe the most used sustainable debt and equity instruments.</p> <p>3.4 Explain what “green” means in financial instruments and products.</p> <p>3.5 Critically analyse the mechanics of carbon markets and their use.</p>	<p>Landscape of sustainable/ESG finance.</p> <ul style="list-style-type: none"> <li>○ Lending and investment (responsible, ESG, impact.)</li> <li>○ Microfinance.</li> <li>○ Circular economy financing.</li> <li>○ Shareholder activism.</li> <li>○ Philanthropy.</li> </ul> <p>Sustainable financial products and activities:</p> <ul style="list-style-type: none"> <li>○ Debt instruments (Green bonds, Sovereign green bonds.)</li> <li>○ Equity instruments (Direct equity investment, Family offices.)</li> <li>○ Carbon pricing and Carbon markets (Emissions trading, Carbon offsets.)</li> </ul> <ul style="list-style-type: none"> <li>● Key stakeholders in the market and their preferred use of capital. Market participants: buy-side versus sell-side.</li> </ul>
<p>4. Understand the value and use of ESG ratings and labels.</p>	<p>4.1 Define an ESG rating and its difference from credit rating.</p> <p>4.2 Compare and differentiate ESG data, ESG KPI and ESG ratings.</p> <p>4.3 Explain why ESG ratings of the same company published by different ESG rating providers may be vastly different, using the ESG rating categorisation and methodology.</p> <p>4.4 Analyse ESG rating results and compare the ESG ratings of different companies.</p>	<p>ESG data, ratings, and labels:</p> <ul style="list-style-type: none"> <li>○ ESG rating landscape.</li> <li>○ Credit rating agencies vs ESG rating agencies.</li> <li>○ ESG data, KPIs, scoring and rating.</li> <li>○ ESG Rating providers &amp; products .</li> <li>○ Categorization of ESG ratings (coverage, scope, data source, methodology).</li> <li>○ ESG labels and their use by retail investors.</li> </ul>

## Assessment

To achieve a 'pass' for this unit, learners must provide evidence to demonstrate that they have fulfilled all the learning outcomes and meet the standards specified by all assessment criteria.

Learning Outcomes to be met	Assessment Criteria to be covered	Assessment type	Word count (approx. length)
LO1 – LO4	All AC's under LO1 – LO4	Coursework	4,500 words

## Indicative Reading List

Casu, B., Girardone, C., Molyneux, P. (2021) *Introduction to Banking*. 3rd edition. Harlow: Pearson Education Limited. ISBN 978-1292240336

Fisher, P (Editor) (2020) *Making the Financial System Sustainable*. Cambridge: Cambridge University Press

Schoenmaker, D., Schramade, W. (2021) *Principles of Sustainable Finance* ISBN 978-0198869818

Smiles, S., Purcell, J. (2023) *Sustainable Investing in Practice: ESG Challenges and Opportunities*. ISBN 978-1398607903

## Additional Resources

Bank of England: <https://www.bankofengland.co.uk/>

Bank for International Settlement: <https://www.bis.org/>

Climate Bonds Initiative: <https://www.climatebonds.net/>

Equator Principles: <https://equator-principles.com/>

ICMA: <https://icma.org/>

Institute of Chartered Accountants in England and Wales: ESG reporting: <https://www.icaew.com/library/subject-gateways/environment-and-sustainability/environmental-social-and-sustainability-reporting>

Principles for Responsible Banking: <https://www.unepfi.org/banking/bankingprinciples/>

Principles for Responsible Investment: <https://www.unpri.org/>

Principles for Sustainable Insurance: <https://www.unepfi.org/insurance/insurance/>

World Economic Forum: <https://www.weforum.org/>



## Sustainability as a Business Strategy

Unit Reference Number	L/650/9706
Unit Title	Sustainability as a Business Strategy
Unit Level	7
Number of Credits	20
Total Qualification Time (TQT)	200 Hours
Guided Learning Hours (GLH)	100 Hours
Mandatory / Optional	Optional
Sector Subject Area (SSA)	3.4 Environmental conservation
Unit Grading Type	Pass / Fail

### Unit Aims

Climate change, environmental degradation and increasing social inequality are reshaping the business environment. Businesses are expected to act in a responsible way and are recognising that their efforts must be underpinned by a sustainable strategy. The aim of this module is to equip students; with the language and terms used to discuss sustainability in the business context; with an understanding of how a company's value chain can be impacted by sustainability; and an understanding of how businesses can profit from sustainability in a short and a long term. Students will also become familiar with a holistic approach to accounting, reflecting an organisations' sustainability intentions and explore ways to collaborate with NGOs and other stakeholders with a common vision to develop innovative solutions to social and environmental challenges.

### Learning Outcomes, Assessment Criteria and Indicative Content

Learning Outcome – The learner will:	Assessment Criteria – The learner can:	Indicative Content
1. Understand the relationship between Economics and Sustainability and the four rationales of why sustainability is in businesses' interest.	<p>1.1 Define effective corporate sustainability in line with theoretical concepts of the Triple Bottom Line and the four, five and six capitals.</p> <p>1.2 Explain the four rationales for sustainability and why sustainability is beneficial for the environment, business, and society.</p>	<p>Economics and sustainability</p> <ul style="list-style-type: none"> <li>○ The four rationales for sustainability (economic rationale, business rationale, reputational rationale, societal rationale)</li> </ul> <p>Triple Bottom Line (TBL):</p> <ul style="list-style-type: none"> <li>○ Mapping the three bases of TBL on the UN Sustainable Development Goals.</li> </ul>

	<p>1.3 Analyse how the emergence of sustainability and Corporate Social Responsibility is impacting the business agenda.</p> <p>1.4 Analyse the challenges faced by business when addressing social and environmental issues.</p>	<ul style="list-style-type: none"> <li>○ Four, five and six capitals.</li> <li>○ Sustainable consumption.</li> <li>○ Overshoot days.</li> <li>● Theoretical perspectives on business responsibilities: Neoclassical Economics vs Ecocentrism vs Ecological Modernisation.</li> </ul> <p><i>NB: UN SDGs are covered in Unit 1 - Fundamentals of sustainability.</i></p>
<p>2. Understand how sustainability impacts businesses' value chain and how companies can capitalise on being sustainable.</p>	<p>2.1 Explain how organisations can benefit from being sustainable or transforming towards sustainability in the short term.</p> <p>2.2 Explain how organisations can benefit from being sustainable or transforming towards sustainability in the long term.</p> <p>2.3 Analyse how individual elements of the value chain are impacted by sustainability.</p> <p>2.4 Evaluate how sustainability can be contextualised within a traditional value chain.</p>	<p>Sustainability in companies' value chain:</p> <ul style="list-style-type: none"> <li>○ Sustainability in a company's value chain using adapted Porter's model.</li> <li>○ Exploring the 6 known strategies how organisations can financially benefit from sustainability, using the BCG model (reducing operating cost, reducing the cost of capital, employee engagement, new revenue streams, premium pricing, market valuation.)</li> </ul>
<p>3. Understand the limitations of "traditional" accounting and the need to approach the concept of value holistically.</p>	<p>3.1 Explain the concept of Total Impact Measurement and Management and how it can be applied in practice.</p> <p>3.2 Analyse why it is beneficial for organisations to measure holistic impact as well as costs and benefits.</p> <p>3.3 Evaluate the drivers and requirements for sustainability reporting and the key developments in the field.</p>	<p>Holistic accounting covering all bases of the Triple Bottom Line:</p> <ul style="list-style-type: none"> <li>● The need to measure progress beyond cost and benefit.</li> <li>● The PwC concept of Total Impact Measurement and Management (TIMM.)</li> <li>● Sustainability reporting (GRI, CDP, NFRD, IFRS Value reporting.)</li> <li>● Sustainability Awards and League table</li> </ul>

<p>4. Understand the concept of the circular economy, circular business models and the challenges related to operating and financing circular businesses.</p>	<p>4.1 Identify the business challenges associated with access to resources in global markets of the 21<sup>st</sup> century.</p> <p>4.2 Explain the importance of effective resource use and recovery, the concept of waste hierarchy and the true cost of waste.</p> <p>4.3 Analyse the background and the principles of the circular economy and the five known circular business models.</p> <p>4.4 Evaluate the risks associated with circularity in business, including financing, partnerships and collaboration along supply chains.</p>	<p>Circular Economy (CE):</p> <ul style="list-style-type: none"> <li>○ Waste hierarchy and the rationale for circularity in business.</li> <li>○ Calculation of the true cost of waste.</li> <li>○ Use of resources in the last 200 years, resource availability in the future, geopolitical tensions, and interests.</li> <li>○ Principles of CE explained using the “butterfly diagram”. Business model canvas amended for circularity.</li> <li>○ Examples of the five known circular business models.</li> <li>○ Challenges related to implementation of circularity and financing of circular businesses.</li> </ul>
<p>5. Understand the role of marketing and stakeholder engagement in the transition to sustainability and the risks of poor marketing practices.</p>	<p>5.1 Identify the most suitable communication strategy for different types of stakeholder groups.</p> <p>5.2 Explain what “cause-related marketing” and “social marketing campaigns” are and why they may bear a reputational risk.</p> <p>5.3 Assess how marketing can both promote and hinder efforts of sustainability transition.</p> <p>5.4 Analyse the five key market segments related to sustainability and the fallacy that some customers are inherently “ethical”.</p> <p>5.5 Analyse how businesses can constructively collaborate with NGOs to find a common ground and develop innovative solutions to social and economic issues.</p> <p>5.6 Evaluate the role stakeholders can play in influencing and driving the sustainability agenda.</p>	<p>Marketing:</p> <ul style="list-style-type: none"> <li>○ The 4P model amended (People, Product, Price, Packaging, Promotion).</li> <li>○ Market segmentation for sustainability.</li> <li>○ The myth of an “ethical consumer”</li> <li>○ What is meant by Greenwash?</li> <li>○ Advertising guidelines.</li> <li>○ Cause-related marketing.</li> <li>○ Social marketing campaigns. How to do them well, how to do them badly. Reputational risk.</li> </ul> <ul style="list-style-type: none"> <li>● Stakeholder communication in line with different stakeholder categories.</li> <li>● Role of partnerships and NGOs.</li> </ul>

## Assessment

To achieve a 'pass' for this unit, learners must provide evidence to demonstrate that they have fulfilled all the learning outcomes and meet the standards specified by all assessment criteria.

Learning Outcomes to be met	Assessment Criteria to be covered	Assessment type	Word count (approx. length)
LO1 – LO5	All ACs under LO1 – LO5	Coursework	4,500 words

## Indicative Reading List

Akerlof, G. (1970). *The Market for "Lemons": Quality Uncertainty and the Market Mechanism*. The Quarterly Journal of Economics, 84(3), 488-500

Braungart, M., McDonough, W. (2009) *Cradle to Cradle. Remaking the way we make things*. ISBN 978-0099535478

Elkington, J. (2021) *Green Swans: The Coming Boom in Regenerative Capitalism*. ISBN 978-1732439122

Pagitsas, C. (2022) *Chief Sustainability Officers at Work: How CSOs Build Successful Sustainability and ESG Strategies*. ISBN 978-1484278659

Weybrecht, G. (2013) *The Sustainable MBA: A Business Guide to Sustainability*, 2<sup>nd</sup> edition. ISBN 978-1118760635

## Additional Resources

Ellen MacArthur Foundation: <https://www.ellenmacarthurfoundation.org/>

Stockholm Resilience Centre: <https://www.stockholmresilience.org/>

UN SDGs: <https://sdgs.un.org/goals>



## **IMPORTANT NOTE**

Whilst we make every effort to keep the information contained in programme specification up to date, some changes to procedures, regulations, fees matter, timetables, etc may occur during your studies. You should, therefore, recognise that this booklet serves only as a useful guide to your learning experience.

For updated information please visit our website [www.othm.org.uk](http://www.othm.org.uk).