

WJEC GCSE Geography

Approved by Qualifications Wales

Non-Examination Assessment Handbook

Unit 4: Sustainable Solutions (3140U4)

Teaching from 2025

For assessment from 2027



This Qualifications Wales regulated qualification
is not available to centres in England.

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About this handbook: Information for Teachers

This handbook contains the assessment materials for Unit 4: Sustainable Solutions.

Within this handbook, you will find:

- information for teachers on how to manage arrangements for assessment
- **information for candidates** which includes:
 - assessment details (phase 1 and phase 2)
 - a detailed breakdown of each task
 - the mark scheme which must be used to assess candidate work.

You must provide each candidate with a copy of the information for candidates contained within this handbook.

Managing the assessment

This is a centre-marked (internal) non-examination assessment. The following arrangements must be followed when managing and marking the assessment.

Time

Candidates must be allowed **6 hours** to complete this assessment, split into **Phase 1** (research) and **Phase 2** (completing tasks 1 to 3). Candidates should spend approximately:

- 3 hours completing research into the issue
- 20 minutes completing task 1
- 1 hour 30 minutes completing task 2
- 1 hour 10 minutes completing task 3.

The time suggested for each task takes account of the contribution of the task to the overall assessment requirements. There can be no changes to the total time available for this assessment. Centres can, however, amend the suggested time available for each task.

Resources

Candidates must have access to the Resource Pack (released annually in September on the Portal), the information for candidates from within this handbook and any necessary resources, as specified in the detailed task tables within the candidate information.

Collaboration

Group work is **not** allowed.

Supervision

All tasks in this unit are taken under indirect supervision:

Type	Description
Indirect	<p>Candidates do not need to be directly supervised at all times.</p> <p>The centre must ensure that:</p> <ul style="list-style-type: none">• all candidates participate in the assessment• there is sufficient supervision to ensure that work can be authenticated• the work an individual candidate submits for assessment is his/her own. <p>Candidates' work must always remain within the centre and must be stored securely between timetabled sessions.</p>

Centres must have arrangements in place to ensure candidates cannot access evidence they have been developing outside of supervised activities.

Authentication

Supervision must be in place to ensure the authenticity of evidence produced for summative assessment.

You should not provide input or guidance to candidates during the assessment time. This includes providing formative feedback on the evidence being produced. You can provide guidance on the requirements of the task and remind candidates of the mark bands and how they can be interpreted.

Candidates can review and redraft evidence independently within the time controls for the assessment.

Candidates must sign the declaration to confirm that all evidence submitted for moderation is their own work and that any sources used have been acknowledged.

Assessors must sign the declaration to confirm that evidence submitted for moderation was completed under the controlled conditions set out in this assessment.

Candidate evidence

The acceptable formats for evidence of each of the tasks is summarised in the task tables. Any modified assessment must enable the candidate to generate the evidence required in this table.

Marking the assessment

The marking scheme for this assessment is included in the candidate pack.

All marking of evidence must be made against the marking scheme provided. Evidence marked must comply with any requirements set out in the information for candidates.

Written evidence must be annotated to show how it relates to the mark band requirements.

Marking should only be undertaken by a designated assessor. An assessor should have appropriate expertise in the subject and level for a specified unit. The assessor is responsible for ensuring that:

- assessment is conducted under the controls specified in the task table
- they are clear about the requirements of the assessment and marking scheme prior to commencing assessment
- evidence presented for assessment is valid, authentic; reliable and credible
- assessment decisions are accurately recorded
- evidence is appropriately annotated
- judgements are only made against the mark band statements.

A mark record sheet must be completed for each candidate.

Further information

You should refer the JCQ Instructions for conducting non-examination assessment for further information on managing assessment within our GCSE Qualifications.

Assessment details

For this assessment learners are required to undertake a decision-making exercise based on a Candidate Resource Pack that contains a sustainability issue with a number of possible options. In Phase 1 of the decision-making candidates will need to research the issue beyond the Candidate Resource Pack. Candidates should then produce a maximum of **two** sides of A4 notes to be used during the assessment. These notes will be submitted alongside the response to the tasks to ensure that they are in line with the instructions for Phase 1 and do not contain pre-written answers to the tasks in Phase 2.

The assignment, included within the Candidate Resource Pack, will be released on the Portal during the first week of September for assessment in that academic year. The Resource Pack will change annually. Learners should not have access to the Resource Pack until the start of the assessment. Centres have the flexibility to decide when during the year learners undertake the assignment.

This assessment contributes to 15% of the overall qualification grade and will take 6 hours to complete. The assignment could be completed in one sitting, or in multiple, shorter sessions. The assignment will be marked out of a total of 60 marks.

This unit will be assessed through an externally set assignment and will be marked by the centre and moderated by WJEC. Assessments must be submitted digitally (they may be handwritten and scanned or completed digitally).

The submission date for your Unit 4 marks and samples via IAMIS will be **5th May** in the year of award. The moderation samples to be submitted will be generated automatically by IAMIS following the submission of marks.

The set tasks and mark scheme are contained within this handbook. The Candidate Resource Pack will be released annually starting in September 2026.

Information for Candidates

Assessment

Phase 1 – Research the issue (approximately 3 hours)

This phase requires you to use the Candidate Resource Pack, apply your previous learning and undertake research to explore the issue presented.

You should then produce a maximum of **two** sides of A4 notes to be used during the assessment. These notes will be submitted alongside the response to the tasks and must not contain pre-written answers to the tasks you are about to complete.

Phase 2 – Responding to the issue (approximately 3 hours)

You are required to complete the tasks to:

- summarise and present the geographical issue presented in the resource booklet
- present the potential benefits and negative impacts of each proposed option on people (including any human rights and diversity issues), the economy and the environment
- assess the potential positive and negative impacts that you have presented for each of the proposed options to form a sustainability impact assessment
- recommend the most suitable option based on your sustainability impact assessment
- explain why the other options have been rejected
- demonstrate how your chosen option links to specific goals from the:
 - the United Nations' Sustainable Development Goals (SDGs)
 - the well-being goals in the Well-being of Future Generations Act (Wales) 2015.

Tasks

	Task	Evidence	Controls
1	<p>Summarise and present the geographical issue presented in the resource booklet.</p> <p>You should:</p> <ul style="list-style-type: none">• demonstrate the geographical concepts linked to the issue• specify the locality of the issue. <p>[6 marks]</p>	Summary of issue.	<p>Supervision: Indirect</p> <p>Guidance: Not permitted</p> <p>Resources: <ul style="list-style-type: none">• resource booklet• permitted notes.</p> <p>Collaboration: Not permitted</p>
You should spend approximately 20 minutes completing this task.			

	Task	Evidence	Controls
2	<p>Presentation</p> <p>(a) Communicate the potential benefits of each proposed option on all the following areas:</p> <ul style="list-style-type: none"> • society (including any human rights and diversity issues) • the economy • the environment. <p>[9 marks]</p> <p>(b) Communicate the potential negative impacts of each proposed option on all the following areas:</p> <ul style="list-style-type: none"> • society (including any human rights and diversity issues) • the economy • the environment. <p>[9 marks]</p> <p>N.B. 2(a) and 2(b) can be presented together.</p> <p>Sustainability impact assessment</p> <p>(c) Assess the potential positive and negative impacts that you have presented for each of the proposed option to form a sustainability impact assessment.</p> <p>[10 marks]</p>	<p>Presentation</p>	<p>Supervision: Indirect</p> <p>Guidance: Not permitted</p> <p>Resources:</p> <ul style="list-style-type: none"> • resource booklet • permitted notes. <p>Collaboration: Not permitted</p>
<p>You should spend approximately 1 hour 30 minutes completing this task.</p>			

	Task	Evidence	Controls
3	<p>(a) Recommend the most suitable option based on your sustainability impact assessment.</p> <p>You should:</p> <ul style="list-style-type: none"> • analyse the information in the resource booklet and any additional research within your permitted notes • make reference to people, economy and the environment • justify your choice. <p>[10 marks]</p> <p>(b) Explain why the other options have been rejected.</p> <p>[6 marks]</p> <p>(c) Demonstrate how your chosen option for the location in question links to specific goals from:</p> <ul style="list-style-type: none"> • the United Nations' Sustainable Development Goals (SDGs) • the well-being goals in the Well-being of Future Generations Act (Wales) 2015. <p>[10 marks]</p>	Presentation	<p>Supervision: Indirect</p> <p>Guidance: Not permitted</p> <p>Resources:</p> <ul style="list-style-type: none"> • resource booklet • permitted notes. <p>Collaboration: Not permitted</p>

You should spend approximately 1 hour 10 minutes completing this task.

End of tasks

Mark scheme

The following mark scheme will be used to assess your work.

0 marks will be awarded if there is no evidence or submitted work is not worthy of credit.

Task 1

Summarise and present the geographical issue presented in the resource booklet.

You should:

- demonstrate the geographical concepts linked to the issue
- specify the locality of the issue.

AO2

Marks available

Evidence	1	2	3	4
Summary	The summary of the issue uses simple statements drawn from the resource. The understanding of the concepts may be limited or superficial. The locality of the issue is stated.	The summary communicates some of the main issues and ideas. Statements show some understanding of concepts. The locality of the issue is clearly stated.	The summary is detailed and communicates the main issues and ideas. Statements are linked together and show an understanding of concepts. The locality of the issue is described.	The summary is highly effective and communicates all the issues and ideas. Statements are clearly linked together and show a clear understanding of concepts. The locality of the issue is clearly described.
	Total: /4			

AO4		
Marks available		
Evidence	1	2
Presentation	There is a basic structure to the response. Communication is basic.	The response is organised and well structured. Communication is clear and logical.
	Total: /2	

Task 2 (a)

Communicate the potential benefits of each proposed option on **all** the following areas:

- society (including any human rights and diversity issues)
- the economy
- the environment.

Award up to **three** marks for each area (up to a maximum of 9 marks).

AO4**9 marks available**

Evidence	1	2	3
Society (including human rights and diversity)	A limited response that communicates minimal benefits for society. The response provides a limited explanation of how the options benefit different groups of people.	A sound response that communicates some benefits for society. The response provides an explanation of how the options benefit a range of people.	An effective response that clearly draws upon ideas and links these to several benefits for society. The response provides a detailed explanation of how the options benefit a wide range of people.
The economy	A limited response that communicates minimal benefits for the economy.	A sound response that communicates some benefits to the economy.	An effective response that clearly draws upon ideas and links these to several benefits for the economy.
The environment	A limited response that communicates minimal benefits for the environment.	A sound response that communicates some benefits to the environment.	An effective response that clearly draws upon ideas and links these to several benefits for the environment.
			Total: /9

Task 2 (b)

Communicate the potential negative impacts of each proposed option on **all** the following areas:

- society (including human rights and diversity)
- the economy
- the environment.

Award up to **three** marks for each area (up to a maximum of 9 marks).

AO4**9 marks available**

Evidence	1	2	3
Society (including human rights and diversity)	A limited response that communicates minimal negative impacts for society. The response provides a limited explanation of how the negative impacts affect different groups of people.	A sound response that communicates some negative impacts for society. The response provides an explanation of how the negative impacts affect a range of people.	An effective response that clearly draws upon ideas and links these to several negative impacts for society. The response provides a detailed explanation of how the negative impacts affect a wide range of people.
The economy	A limited response that communicates minimal negative impacts for the economy.	A sound response that communicates some of the negative impacts for the economy.	An effective response that clearly draws upon ideas and links these to several negative impacts for the economy.
The environment	A limited response that communicates minimal negative impacts for the environment.	A sound response that communicates some of the negative impacts to the environment.	An effective response that clearly draws upon ideas and links these to several of the negative impacts for the environment.
			Total: /9

Task 2 (c)

Assess the potential positive and negative impacts that you have presented for each of the proposed options to form a sustainability impact assessment.

Band	AO3
4	<p style="text-align: center;">9 -10 marks</p> <p>An excellent assessment which demonstrates:</p> <ul style="list-style-type: none">• a well-balanced evaluation of the options• highly effective analysis of the sustainability of options based on their positive and negative impacts• highly effective explanation of the different options• highly effective communication of the key issues• highly relevant and valid judgements based on evidence.
3	<p style="text-align: center;">6 - 8 marks</p> <p>A good assessment which demonstrates:</p> <ul style="list-style-type: none">• a balanced evaluation of the options• effective analysis of the sustainability of options based on their positive and negative impacts• effective explanation of the different options• effective communication of the key issues• relevant and valid judgements based on evidence.
2	<p style="text-align: center;">3 – 5 marks</p> <p>A basic assessment which demonstrates:</p> <ul style="list-style-type: none">• a simple evaluation of the options• some attempt to analyse the sustainability of options based on their impact• some attempt to explain the options• clear communication of some of the key issues• a brief judgement based on some of the evidence.

1	<p style="text-align: right;">1 - 2 marks</p> <p>A limited assessment which demonstrates:</p> <ul style="list-style-type: none"> • a simple evaluation • minimal attempt to analyse the positive and negative impacts of the options • a superficial judgement that may not be based on evidence.
0	<p style="text-align: right;">0 marks</p> <p>No response attempted or nothing worthy of credit.</p>

Task 3 (a)

Recommend the most suitable option based on your sustainability impact assessment.

You should:

- analyse the information in the resource booklet and any additional research within your permitted notes
- make reference to people, economy and the environment
- justify your choice.

Band	AO3
4	<p>9 - 10 marks</p> <p>An excellent recommendation, which demonstrates:</p> <ul style="list-style-type: none">• a well-balanced argument• a wide range of impacts on people, the environment and the economy• highly effective analysis of the information in the resource booklet and additional information• highly effective communication of the key issues• highly relevant and valid judgements based on evidence.
3	<p>6 - 8 marks</p> <p>A good recommendation, which demonstrates:</p> <ul style="list-style-type: none">• a balanced argument• a range of impacts on people, the environment and the economy• effective analysis of the information in the resource booklet and additional information• effective communication of the key issues• relevant and valid judgements based on evidence.
2	<p>3 - 5 marks</p> <p>A basic recommendation, which demonstrates:</p> <ul style="list-style-type: none">• a basic argument• some attempt to analyse the impacts on people, the environment and the economy• basic analysis of the information in the resource booklet• clear communication of some of the key issues• a brief judgement based on some of the evidence.

1	1 - 2 marks A limited recommendation, which demonstrates: <ul style="list-style-type: none">• a simple argument• minimal attempt to analyse the impacts on people, the environment and/or the economy• limited use of the sources• a superficial judgement that may not be based on evidence.
0	0 marks Response not creditworthy or not attempted.

Task 3 (b)

Explain why the other options have been rejected.

Band	AO2
3	5 - 6 marks A very good explanation, which demonstrates: <ul style="list-style-type: none">• clear understanding of the alternative options• a clear and developed rationale for rejecting the alternative options• a clear response that is organised and well structured.
2	3 - 4 marks A good explanation, which demonstrates: <ul style="list-style-type: none">• some understanding of the alternative options• some reasons for rejecting the alternative options• a generally clear and structured response.
1	1 - 2 marks A basic explanation, which demonstrates: <ul style="list-style-type: none">• limited understanding of the alternative options• few or unclear reasons for rejecting the alternative options• a lack of clarity in parts, and statements that are linked by a basic structure.
0	0 marks Response not creditworthy or not attempted.

Task 3 (c)

Demonstrate how your chosen option for the location in question links to specific goals from:

- the United Nations' Sustainable Development Goals (SDGs)
- the well-being goals in the Well-being of Future Generations Act (Wales) 2015.

AO2		
Band	The United Nations' Sustainable Development Goals (SDGs)	The wellbeing goals in the Well-being of Future Generations Act (Wales) 2015.
3	<p>5 marks</p> <p>A very good response, which demonstrates:</p> <ul style="list-style-type: none"> • clear knowledge and understanding of the SDGs that are relevant to the chosen option and location in question • the selection of appropriate SDGs • an organised and well-structured approach. 	<p>5 marks</p> <p>A very good response, which demonstrates:</p> <ul style="list-style-type: none"> • clear knowledge and understanding of the wellbeing goals relevant to the option chosen and location in question • the selection of appropriate wellbeing goals • an organised and well-structured approach.
2	<p>3-4 marks</p> <p>A good response, which demonstrates:</p> <ul style="list-style-type: none"> • some knowledge and understanding of appropriate SDGs, that may be relevant to the chosen option and location in question • the selection of some appropriate SDGs • a generally clear and structured approach. 	<p>3-4 marks</p> <p>A good response, which demonstrates:</p> <ul style="list-style-type: none"> • some knowledge and understanding of appropriate wellbeing goals that may be relevant to the chosen option and location in question • selection of some appropriate wellbeing goals. • a generally clear and structured approach.
1	<p>1-2 marks</p> <p>A basic explanation, which demonstrates:</p> <ul style="list-style-type: none"> • minimal understanding of the SDGs or their relevance to the chosen option and location in question • selection of inappropriate or irrelevant SDGs • a lack of clarity in parts, and statements that are linked by a basic structure. 	<p>1-2 marks</p> <p>A basic explanation, which demonstrates:</p> <ul style="list-style-type: none"> • minimal understanding of the wellbeing goals and their relevance to the chosen option and location in question • selection of inappropriate or irrelevant wellbeing goals • a lack of clarity in parts, and statements that are linked by a basic structure.
0	<p>0 marks</p> <p>Response not creditworthy or not attempted.</p>	<p>0 marks</p> <p>Response not creditworthy or not attempted.</p>