

## Appendix 1

### Assessment Criteria and Mark Bands for Unit AS 2: Renewable Energy Technologies

Assessment Objectives	Mark Band 1: Basic	Mark Range	Mark Band 2: Satisfactory	Mark Range	Mark Band 3: Good	Mark Range	Mark Band 4: Excellent	Mark Range
		Relevant material is poorly organised and presented with a lack of clarity and coherence.		Relevant material is sufficiently organised and presented with some clarity and coherence.		Relevant material is well organised and presented with a good degree of clarity and coherence.		Relevant material is succinct, well organised and presented with a high degree of clarity and coherence.
<b>AO1</b> <b>Total:</b> <b>[14]</b>	<p>Candidates may require considerable guidance and support to:</p> <ul style="list-style-type: none"> <li>✓ produce a technical report that demonstrates a basic understanding of relevant concepts and context of different types of energy systems;</li> <li>✓ demonstrate basic research skills and produce a research summary of at least two renewable energy technologies that lacks focus and structure;</li> <li>✓ use basic written communication and specialist vocabulary; and</li> <li>✓ identify reference material with limited appropriateness and accuracy.</li> </ul>	[1–3]	<p>Candidates may require some guidance to:</p> <ul style="list-style-type: none"> <li>✓ produce a technical report that demonstrates a satisfactory understanding of relevant concepts and context of different types of energy systems;</li> <li>✓ demonstrate adequate research skills and produce a research summary of at least two renewable energy technologies that shows some evidence of focus and structure;</li> <li>✓ use satisfactory written communication and specialist vocabulary; and</li> <li>✓ identify some reference material appropriately and accurately.</li> </ul>	[4–6]	<p>Candidates may require little guidance to:</p> <ul style="list-style-type: none"> <li>✓ produce a technical report that demonstrates a good understanding of relevant concepts and context of different types of energy systems;</li> <li>✓ demonstrate good research skills and produce a research summary of at least two renewable energy technologies that shows good evidence of focus and structure;</li> <li>✓ use good written communication and specialist vocabulary; and</li> <li>✓ identify most reference material accurately and appropriately.</li> </ul>	[7–10]	<p>Candidates work independently to:</p> <ul style="list-style-type: none"> <li>✓ produce a technical report that demonstrates an extensive understanding of relevant concepts and context of different types of energy systems;</li> <li>✓ demonstrate thorough research skills and produce a research summary of at least two renewable energy technologies that shows strong evidence of focus and structure;</li> <li>✓ use excellent written communication and specialist vocabulary; and</li> <li>✓ identify all reference material accurately and appropriately.</li> </ul>	[11–14]
<b>Award zero for work not worthy of credit.</b>								

## Assessment Criteria and Mark Bands for Unit AS 2: Renewable Energy Technologies

Assessment Objectives	Mark Band 1: Basic	Mark Range	Mark Band 2: Satisfactory	Mark Range	Mark Band 3: Good	Mark Range	Mark Band 4: Excellent	Mark Range
		Relevant material is poorly organised and presented with a lack of clarity and coherence.		Relevant material is sufficiently organised and presented with some clarity and coherence.		Relevant material is well organised and presented with a good degree of clarity and coherence.		Relevant material is succinct, well organised and presented with a high degree of clarity and coherence.
<b>AO2</b>  <b>Total: [18]</b>	Candidates may require considerable guidance and support to: <ul style="list-style-type: none"> <li>✓ demonstrate a basic awareness of the design implications presented by the scenario task;</li> <li>✓ provide a basic rationale for the choice of investigation that is supported by limited research;</li> <li>✓ produce a basic design for the investigation; and</li> <li>✓ produce simple calculations (possibly with errors) to support final recommendations.</li> </ul>	[1–4]	Candidates may require some guidance to: <ul style="list-style-type: none"> <li>✓ demonstrate a satisfactory awareness of the design implications presented by the scenario task;</li> <li>✓ provide a satisfactory rationale for the choice of investigation that is supported by satisfactory research;</li> <li>✓ produce a satisfactory design for the investigation; and</li> <li>✓ produce satisfactory calculations (possibly with minor errors) to support final recommendations.</li> </ul>	[5–8]	Candidates may require little guidance to: <ul style="list-style-type: none"> <li>✓ demonstrate a broad awareness of the design implications presented by the scenario task;</li> <li>✓ provide a clear rationale for the choice of investigation that is supported by good research;</li> <li>✓ produce a good design for the investigation; and</li> <li>✓ produce clear and accurate calculations to support final recommendations.</li> </ul>	[9–13]	Candidates work independently to: <ul style="list-style-type: none"> <li>✓ demonstrate an extensive awareness of the design implications presented by the scenario task;</li> <li>✓ provide a strong rationale for the choice of investigation that is supported by extensive research;</li> <li>✓ produce a detailed and comprehensive design for the investigation; and</li> <li>✓ produce comprehensive and accurate calculations to support final recommendations.</li> </ul>	[14–18]
<b>Award zero for work not worthy of credit.</b>								

### Assessment Criteria and Mark Bands for AS 2: Renewable Energy Technologies

Assessment Objectives	Mark Band 1: Basic	Mark Range	Mark Band 2: Satisfactory	Mark Range	Mark Band 3: Good	Mark Range	Mark Band 4: Excellent	Mark Range
		Relevant material is poorly organised and presented with a lack of clarity and coherence.		Relevant material is sufficiently organised and presented with some clarity and coherence.		Relevant material is well organised and presented with a good degree of clarity and coherence.		Relevant material is succinct, well organised and presented with a high degree of clarity and coherence.
<b>AO3</b> <b>Total:</b> <b>[18]</b>	<p>Candidates may require considerable guidance and support to:</p> <ul style="list-style-type: none"> <li>✓ carry out some parts of the investigation and obtain a basic number of measurements that may contain errors;</li> <li>✓ record a basic range of data in a given table and show limited evidence of any interpretation and analysis;</li> <li>✓ include reference to one risk;</li> <li>✓ provide a simple discussion that may not make reference to the issues highlighted in the scenario task; and</li> <li>✓ produce some simple recommendations that may not be supported by findings from the research summary and practical investigations.</li> </ul>	[1–4]	<p>Candidates may require some guidance to:</p> <ul style="list-style-type: none"> <li>✓ carry out most parts of the investigation and obtain a satisfactory number of measurements that may contain errors;</li> <li>✓ record a range of data in a table they devised with some evidence of interpretation and analysis;</li> <li>✓ include reference to number of risks;</li> <li>✓ provide an adequate discussion that makes some reference to the issues highlighted in the scenario task; and</li> <li>✓ produce a list of recommendations that are supported by findings from the research summary and practical investigations;</li> </ul>	[5–8]	<p>Candidates may require little guidance to:</p> <ul style="list-style-type: none"> <li>✓ carry out all parts of the investigation and obtain a complete set of measurements, using appropriate precision;</li> <li>✓ record data in at least two different formats they devised and show evidence of meaningful interpretation and analysis;</li> <li>✓ include a number of risks appropriate to the investigation and suggest how to minimise these;</li> <li>✓ provide a good discussion that makes clear reference to the issues highlighted in the scenario task; and</li> <li>✓ produce a list of relevant recommendations that are clearly supported by findings from the research summary and practical investigations.</li> </ul>	[9–13]	<p>Candidates work independently to:</p> <ul style="list-style-type: none"> <li>✓ carry out all parts of the investigation and obtain a complete set of accurate measurements, using high level technical skills;</li> <li>✓ record data in a range of different formats they devised and show evidence of clear and meaningful interpretation and analysis;</li> <li>✓ include all risks associated with the investigation and suggest ways to minimise these;</li> <li>✓ provide an extensive discussion that makes clear and strong reference to the issues highlighted in the scenario task; and</li> <li>✓ produce a list of comprehensive recommendations that are strongly supported by findings from the research summary and practical investigations.</li> </ul>	[14–18]

### Assessment Criteria and mark bands for AS 2: Renewable Energy Technologies (cont.)

Assessment Objectives	Mark Band 1: Basic	Mark Range	Mark Band 2: Satisfactory	Mark Range	Mark Band 3: Good	Mark Range	Mark Band 4: Excellent	Mark Range
		Relevant material is poorly organised and presented with a lack of clarity and coherence.		Relevant material is sufficiently organised and presented with some clarity and coherence.		Relevant material is well organised and presented with a good degree of clarity and coherence.		Relevant material is succinct, well organised and presented with a high degree of clarity and coherence.
	Candidates may require considerable guidance and support to: <ul style="list-style-type: none"> <li>provide a basic research evaluation that makes limited reference to the issues highlighted in the scenario task.</li> </ul>	[1–4]	Candidates may require some guidance to: <ul style="list-style-type: none"> <li>provide a satisfactory research evaluation that makes adequate reference to the issues highlighted in the scenario task.</li> </ul>	[5–8]	Candidates may require little guidance to: <ul style="list-style-type: none"> <li>provide a good research evaluation that makes clear reference to the issues highlighted in the scenario task.</li> </ul>	[9–13]	Candidates work independently to: <ul style="list-style-type: none"> <li>provide a comprehensive research evaluation that makes strong reference to the issues highlighted in the scenario task.</li> </ul>	[14–18]
<b>Award zero for work not worthy of credit.</b>								

## Assessment Criteria and Mark Bands for A2 2: Environmental Building Performance and Measurement

Assessment Objectives	Mark Band 1: Basic	Mark Range	Mark Band 2: Satisfactory	Mark Range	Mark Band 3: Good	Mark Range	Mark Band 4: Excellent	Mark Range
		Relevant material is poorly organised and presented with a lack of clarity and coherence.		Relevant material is sufficiently organised and presented with some clarity and coherence.		Relevant material is well organised and presented with a good degree of clarity and coherence.		Relevant material is succinct, well organised and presented with a high degree of clarity and coherence.
<b>AO1</b>	Candidates may require considerable guidance and support to:	[1–3]	Candidates may require some guidance to:	[4–6]	Candidates may require little guidance to:	[7–9]	Candidates work independently to:	[10–12]
<b>Total: [12]</b>	<ul style="list-style-type: none"> <li>· produce a technical report that demonstrates a basic understanding of CSH within the wider context of sustainability measurement;</li> <li>· display a basic understanding of CSH measurement criteria;</li> <li>· use basic written communication and specialist vocabulary that is basic; and</li> <li>· identify reference material with basic vocabulary and accuracy.</li> </ul>		<ul style="list-style-type: none"> <li>· produce a technical report that demonstrates an adequate understanding of CSH within the wider context of sustainability measurement;</li> <li>· display a satisfactory understanding of CSH measurement criteria;</li> <li>· use satisfactory written communication and specialist vocabulary that is adequate; and</li> <li>· identify some reference material accurately and appropriately.</li> </ul>		<ul style="list-style-type: none"> <li>· produce a technical report that provides a good overview of CSH within the wider context of sustainability measurement;</li> <li>· display a clear understanding of CSH measurement criteria;</li> <li>· use good written communication and specialist vocabulary that is competent; and</li> <li>· identify most reference material accurately and appropriately.</li> </ul>		<ul style="list-style-type: none"> <li>· produce a technical report that provides a comprehensive and thorough overview of CSH within the wider context of sustainability measurement;</li> <li>· display a clear and thorough understanding of CSH measurement criteria;</li> <li>· use excellent written communication and specialist vocabulary that is highly competent; and</li> <li>· identify all reference material accurately and appropriately.</li> </ul>	
<b>Award zero for work not worthy of credit.</b>								

## Assessment Criteria and Mark Bands for Unit A2 2: Environmental Building Performance and Measurement

Assessment Objectives	Mark Band 1: Basic	Mark Range	Mark Band 2: Satisfactory	Mark Range	Mark Band 3: Good	Mark Range	Mark Band 4: Excellent	Mark Range
		Relevant material is poorly organised and presented with a lack of clarity and coherence.		Relevant material is sufficiently organised and presented with some clarity and coherence.		Relevant material is well organised and presented with a good degree of clarity and coherence.		Relevant material is succinct, well organised and presented with a high degree of clarity and coherence.
<b>AO2</b> <b>Total:</b> <b>[20]</b>	<p>Candidates may require considerable guidance and support to:</p> <ul style="list-style-type: none"> <li>✓ identify a limited number of simple physical measurements required for the specified <b>category</b> within the assessment task;</li> <li>✓ make minimal or no reference to health and safety considerations;</li> <li>✓ identify and source limited building data from a published source;</li> <li>✓ produce simple calculations, which provide some basis for accumulation of CSH credits; and</li> <li>✓ produce an overall CSH rating that is not related to the evidence provided.</li> </ul>	[1–5]	<p>Candidates may require some guidance to:</p> <ul style="list-style-type: none"> <li>✓ identify a satisfactory number of physical measurements required for the specified <b>category</b> within the assessment task;</li> <li>✓ make satisfactory reference to health and safety considerations;</li> <li>✓ identify and source satisfactory building data from more than one published source, not necessarily addressing all <b>eight</b> categories;</li> <li>✓ produce appropriate calculations to adequately demonstrate the accumulation of CSH credits; and</li> <li>✓ produce an overall CSH rating that bears some resemblance to the evidence provided.</li> </ul>	[6–10]	<p>Candidates may require little guidance to:</p> <ul style="list-style-type: none"> <li>✓ identify a broad range of physical measurements (increasing in complexity) required for the specified <b>category</b> within the assessment task;</li> <li>✓ make clear reference to health and safety considerations;</li> <li>✓ identify and source a good range of building data from a variety of published sources, addressing all <b>eight</b> categories;</li> <li>✓ produce clear and accurate calculations to demonstrate the accumulation of CSH credits; and</li> <li>✓ produce an overall CSH rating that is clearly related to the evidence provided.</li> </ul>	[11–15]	<p>Candidates work independently to:</p> <ul style="list-style-type: none"> <li>✓ identify a comprehensive range of physical measurements (increasing in complexity) required for the specified <b>category</b> within the assessment task;</li> <li>✓ make detailed reference to health and safety considerations;</li> <li>✓ identify and source a comprehensive range of building data from a variety of published sources, addressing all <b>eight</b> categories;</li> <li>✓ produce comprehensive and accurate calculations to demonstrate the accumulation of CSH credits; and</li> <li>✓ produce an overall CSH rating that is strongly related to the evidence provided.</li> </ul>	[16–20]
<b>Award zero for work not worthy of credit.</b>								

## Assessment Criteria and Mark Bands for Unit A2 2: Environmental Building Performance and Measurement

Assessment Objectives	Mark Band 1: Basic	Mark Range	Mark Band 2: Satisfactory	Mark Range	Mark Band 3: Good	Mark Range	Mark Band 4: Excellent	Mark Range
		Relevant material is poorly organised and presented with a lack of clarity and coherence.		Relevant material is sufficiently organised and presented with some clarity and coherence.		Relevant material is well organised and presented with a good degree of clarity and coherence.		Relevant material is succinct, well organised and presented with a high degree of clarity and coherence.
<b>AO3</b> <b>Total: [18]</b>	<p>Candidates may require considerable guidance and support to:</p> <ul style="list-style-type: none"> <li>✓ make and record a limited number of physical measurements that may contain errors;</li> <li>✓ record data in a given table with basic or no use of any other format to display data;</li> <li>✓ make minimal or no reference to health and safety considerations; and</li> <li>✓ produce a simple commentary with basic analysis that makes minimal links between the CSH rating and the building's performance.</li> </ul>	[1–4]	<p>Candidates may require some guidance to:</p> <ul style="list-style-type: none"> <li>✓ make and record a satisfactory number of physical measurements that may contain minor errors;</li> <li>✓ record data in a table/graph they devised, using at least one other format to display data;</li> <li>✓ make satisfactory reference to health and safety considerations; and</li> <li>✓ produce a satisfactory commentary with adequate links between the CSH rating and the building's performance.</li> </ul>	[5–8]	<p>Candidates may require little guidance to:</p> <ul style="list-style-type: none"> <li>✓ make and record a good number of accurate physical measurements without errors;</li> <li>✓ record data in a range of formats they devised that enhance the technical report;</li> <li>✓ make clear reference to health and safety considerations; and</li> <li>✓ produce a good commentary with clear links between the CSH rating and the building's performance.</li> </ul>	[9–13]	<p>Candidates work independently to:</p> <ul style="list-style-type: none"> <li>✓ make and record a complete set of accurate physical measurements without errors and using high level technical skills;</li> <li>✓ record data in a range of formats they devised that fully illustrate and enhance the technical report;</li> <li>✓ make detailed reference to health and safety considerations; and</li> <li>✓ produce an excellent commentary that makes extensive links between the CSH rating and the building's performance.</li> </ul>	[14–18]
<b>Award zero for work not worthy of credit.</b>								

### Assessment Criteria and Mark Bands for Unit A2 2: Environmental Building Performance and Measurement (cont.)

Assessment Objectives	Mark Band 1: Basic	Mark Range	Mark Band 2: Satisfactory	Mark Range	Mark Band 3: Good	Mark Range	Mark Band 4: Excellent	Mark Range
		Relevant material is poorly organised and presented with a lack of clarity and coherence		Relevant material is sufficiently organised and presented with some clarity and coherence.		Relevant material is well organised and presented with a good degree of clarity and coherence.		Relevant material is succinct, well organised and presented with a high degree of clarity and coherence.
<b>AO3</b>  <b>Total: [18]</b>	Candidates may require considerable guidance and support to: <ul style="list-style-type: none"> <li>✓ produce a basic list of recommendations with limited or no rationale for each;</li> <li>✓ provide a basic evaluation of the sustainability measurement processes used throughout the task; and</li> <li>✓ use basic written communication and specialist vocabulary.</li> </ul>	[1–4]	Candidates may require some guidance to: <ul style="list-style-type: none"> <li>✓ produce a satisfactory list of recommendations with an adequate rationale for each;</li> <li>✓ provide a satisfactory evaluation of the sustainability measurement processes used throughout the task; and</li> <li>✓ use satisfactory written communication and specialist vocabulary.</li> </ul>	[5–8]	Candidates may require little guidance to: <ul style="list-style-type: none"> <li>✓ produce a good list of recommendations with a relevant rationale for each;</li> <li>✓ provide a good evaluation of the sustainability measurement processes used throughout the task; and</li> <li>✓ use good written communication and specialist vocabulary that is competent.</li> </ul>	[9–13]	Candidates work independently to: <ul style="list-style-type: none"> <li>✓ produce a comprehensive list of recommendations with a strong and relevant rationale for each;</li> <li>✓ provide a detailed and thorough evaluation of the sustainability measurement processes used throughout the task; and</li> <li>✓ use excellent written communication and specialist vocabulary that is highly competent.</li> </ul>	[14–18]
<b>Award zero for work not worthy of credit.</b>								