



**Level 4 Diploma in**

**Non Domestic Green Deal Advice**

**Qualification Specification**

Qualification Recognition Number: 600/6025/6

ABBE Qualification Code: DipNDGDAL412

**April 2019**

## **Why this document is being revised**

This document has been revised by ABBE in April 2019. A summary of the changes made to this document is, as follows:

- New address add to 1.4

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# 1. ABBE

## 1.1 Introduction

ABBE, the Awarding Body for Building Education is a forward thinking organisation that offers a range of apprenticeships, qualifications, benefits and support.

ABBE is regulated by Ofqual for the delivery of a range of qualifications. Our qualifications are nationally recognised helping learners to achieve their full potential and ambitions.

The full range of qualifications can be found on our website <http://www.abbega.co.uk>

## 1.2 Our values, vision and mission

### **Our Values: Quality through Standards**

Our aim is to provide a high quality experience by building a strong community of mutual support and trust. We can use our collective talents to build meaningful partnerships to help us all to achieve our goals. ABBE is a recognised Awarding Organisation with strong professional integrity.

### **Our Vision:**

Is that every learner is confident, successful and has the opportunity to achieve their full potential.

### **Our Mission:**

ABBE Educates, inspires and empowers learners

## 1.3 Qualification Specification

This is the ABBE Qualification Specification for the ABBE Level 4 Diploma in Non Domestic Green Deal Advice. The aim of this specification is to provide learners and centres with information about the content of this qualification.

This specification is a live document and, as such, will be updated when required.

Additional qualification details are available for ABBE approved centres in the ABBE qualification handbook.

## 1.4 Enquiries

Any enquiries relating to this qualification should be addressed to:

ABBE  
Birmingham City University  
University House  
15 Bartholomew Row  
Birmingham  
B5 5JU

Telephone: 0121 331 5174  
Email: [abbeenquiries@bcu.ac.uk](mailto:abbeenquiries@bcu.ac.uk)  
Website: [www.abbega.co.uk](http://www.abbega.co.uk)



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## 2. Qualification Information

### 2.1 Qualification Purpose

The need for the ABBE Level 4 Diploma in Non-Domestic Green Deal Advice has been brought about by the Government's implementation of the Energy Bill which received Royal Assent and became the Energy Act 2011 in October 2011. The Act is intended to provide a legal framework within which energy efficiency measures can be delivered to homes and businesses, and to enable and secure low-carbon energy supplies and fair competition in the UK's energy markets.

This qualification has been developed to enable learners to demonstrate the professional requirements expected by the Department for Energy and Climate Change (DECC) and laid down in National Occupational Standards (NOS). The government is committed to reducing the overall greenhouse gas emissions by 34% by 2020 and 80% by 2050.

This qualification is required to apply for membership of or employment by a Green Deal Advice Organisation (GDAO) that has been certified by a certification body, accredited in their turn by the United Kingdom Accreditation Service (UKAS). This qualification provides the underpinning knowledge and competency required for someone to work as a Green Deal Advisor and Assessor for non-domestic properties. Holders of this qualification are eligible to practice as Non-Domestic Green Deal Advisors and issue Energy Performance Certificates (EPC).

The qualification is available both to experienced advisors and also to those who have little or no previous background knowledge or experience of the Green Deal and/or the Energy Company Obligation or delivering advice over the telephone from a call centre or other location removed from the customer/client advice.

This qualification confirms occupational competence. Holders of this qualification are eligible to practice as Non-Domestic Green Deal Advisors and issue Energy Performance Certificates (EPC).

### 2.2 Who could take this Qualification?

This qualification is a professional qualification for those who wish to pursue a career as a Non-Domestic Green Deal Advisor. Once qualified, Non-Domestic Green Deal Advisors register with an Accreditation Scheme which accredits them to produce Energy Performance Certificates (EPCs).

The qualification is available both to experienced energy assessment practitioners and also to those who have little or no previous background knowledge or experience of conducting energy assessments or delivering energy advice. The qualification is equally suitable for new entrants to the sector seeking to begin a career in energy assessment.

This qualification can be taken as preparation for employment as well as professional development for those interested in specialising in this area.

### 2.3 Qualification Number

ABBE Level 4 Diploma in Non Domestic Green Deal Advice: 600/6025/6



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## 2.4 Qualification Level

This qualification has been listed on the Regulated Qualifications Framework (RQF) at: Level 4

## 2.5 Total Qualification Time

This qualification is allocated Total Qualification Time (TQT) this includes Guided Learning (GL) expressed in hours, which indicates the number of hours of supervised or directed study time and assessment. Credit has also be allocated to this qualification.

- The Total Qualification Time (TQT) for this qualification is: 570
- Guided Learning (GL) for this qualification is: 260
- Credit Value: 57 credits

## 2.6 Progression

This qualification has been designed to encourage participation in education and training in other related areas by:

- enabling current practitioners in Non Domestic Energy Assessment to expand their portfolio of services by encompassing Green Deal assessment and advice
- enable practitioners in delivering Home Energy Advice to incorporate Non Domestic Green Deal assessment and advice into the portfolio of services they offer
- encouraging current practitioners in other energy assessment fields to expand the portfolio of services offered to their customers by encompassing Green Deal assessment and advice
- attracting current residential surveyors and Home Inspectors by the opportunities presented through their offering Non-Domestic Green Deal assessment and advice services
- offering a new career opportunity to learners wanting to provide Green Deal assessment and advice through retraining or up-skilling

## 2.7 Age ranges

Pre 16	No
16-18	No
18+	Yes
19+	Yes

## 2.8 Structure of the Qualification

To achieve the ABBE Level 4 Diploma in Non Domestic Green Deal Advice learners must achieve the eight mandatory units. Additional units are also available for learners but credit from these units will not be counted towards the qualification.

Mandatory Units			
URN	Unit Name	Credit Value	Level
H/503/8162	Conduct energy assessments in a safe, effective and professional manner	6	3
J/503/8168	Prepare for energy assessments of non-dwellings to fulfil regulatory requirements for asset ratings	6	3



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L/503/8169	Undertake energy assessments of existing Level 3 non-dwellings using the Simplified Building Energy Model SBEM	11	3
L/503/8172	Report on the energy assessment of new and existing non-dwellings using Simplified Building Energy Model SBEM	7	4
T/503/8179	Provide information to customers on the principles, financing and operation of the Green Deal	4	3
K/504/0964	Carry out non-domestic energy inspections to determine an Operational Profile and give advice	10	4
R/503/8190	Prepare and issue non-domestic Green Deal Advice Reports	9	4
Y/503/8191	Explain the Green Deal Advice Report to the non-domestic customer	4	4
Additional units			
F/503/8170	Undertake energy assessments of existing Level 4 non-dwellings using the Simplified Building Energy Model SBEM	13	4
J/503/8171	Undertake energy assessments of existing Level 5 non-dwellings requiring the use of Dynamic Simulation Models DSMs	13	5
R/503/8173	Report on the energy assessment of new and existing non-dwellings using Dynamic Simulation Model DSM	9	5
J/504/5895	Carry out Building Regulations compliance checks of as-designed and as-built new-build non-dwellings using the Simplified Building Energy Model (SBEM)	11	4

## 2.9 Barred Units

Units with the same title at different levels or units with the same content cannot be combined in the same qualification.

## 2.10 Language

ABBE qualifications and assessment materials will be provided through the medium of English.

## 2.11 Grading

This qualification is: Pass/Fail



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## **2.12 Pre-course Procedures**

This qualification is available to anyone who is capable of reaching the required standards. They have been developed free from any barriers that unfairly restrict access or progression thereby promoting equal opportunities.

There are no pre-entry requirements for this qualification.

## **2.13 Qualification Review Boards**

Qualification Review Boards (QRBs) are set up for each qualification. The Boards are drawn from employers, centres, Higher Educational Institutes (HEIs) and others with a vested interest in the sector in which the qualification is used. The purpose of the QRB is to ensure that the content of the qualification and the proposed assessment methodology are fit for purpose and are appropriate to meet the requirements of the sector.

QRBs are ongoing and will be scheduled for specific points within the qualification lifetime; at the notional mid-point and again towards the review date of the qualification. During this process, the QRB will consider any feedback received on the performance of the qualification and will consider if the content, structure, purpose and assessment methodology remain appropriate to the needs of the sector. This will help to improve both our qualification and the specification.



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### 3. Qualification Unit(s)

#### Unit 1: Conduct energy assessments in a safe, effective and professional manner

Unit Reference Number: H/503/8162

Level: 3

Credit: 6

#### Unit Summary

To develop knowledge, understanding and skills to contribute to the health, safety and security of the workplace, develop effective working relationships with others, and conduct energy assessments in a professional and ethical manner, complying with organisational and legal requirements at all times.

#### Assessment Guidance

This unit can be assessed using the following method(s):

- Portfolio of evidence

<b>Learning Outcome The learner will:</b>	<b>Assessment Criterion The learner can:</b>
1. Understand the Health and Safety requirements when undertaking energy assessments	1.1 Explain the relevant legal duties for health, safety and security in the workplace
	1.2 Identify the health, safety and security risks that could exist in different locations, and the action to take to minimise or mitigate risks
	1.3 Identify the risks to self which are associated with lone working
	1.4 Explain why it is important to remain alert to the presence of risks in the workplace
	1.5 Explain the importance of personal conduct in maintaining the health, safety and security of yourself or others
	1.6 Explain how to make use of relevant suppliers and manufacturers' instructions for the safe use of equipment, materials and products
	1.7 Explain who should be informed of any conflicts between different health, safety and security requirements
	1.8 Describe the procedures for different types of emergency
	1.9 Identify the types of suggestions for improving health, safety and security at work that could be made and who should be given them



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	1.10 Identify the actions that may be taken to protect customers' property
2. Understand the nature of professional conduct required when conducting energy assessments	2.1 Explain why it is important to promote goodwill and trust when working with others and ways in which this can be achieved
	2.2 Explain how to identify the information you require and the potential sources of such information
	2.3 Describe how to respond to enquiries from others and how to clarify their information needs
	2.4 Explain how to respond to enquiries which are outside your authority, beyond your area of knowledge or expertise or where the information requested is confidential
	2.5 Define the extent and limits for your own competence and expertise and the importance of not working beyond these limits
	2.6 Describe the ways in which disputes or differences of opinion should be handled and resolved to minimise offence and maintain respect
	2.7 Describe the formal complaints procedure that covers your work in terms of: <ul style="list-style-type: none"> <li>any specific organisational requirements with regard to complaints</li> <li>your own responsibility to deal with complaints and attempt to resolve them before escalating to the Accreditation Body, or the equivalent in the Devolved Administrations</li> </ul>
	2.8 Identify the range of potential conflicts of interest that you may encounter and the action required to manage these
	2.9 Explain why it is important to present a positive personal and professional image when dealing with people and how this can be achieved
	2.10 Describe the ways in which you may develop yourself within your role to cover your development needs
	2.11 Define the level of service expected by customers, their expectations as to the outcomes of the energy assessment or advice process and how to deliver an appropriate level of customer service
	2.12 Explain the need for prompt responses to enquiries
3. Understand the legislation, codes of conduct and	3.1 Describe the relevant policies and legislation on combating climate change and the reduction of carbon emissions from buildings



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compliance requirements in relation to energy assessment	3.2 Describe the relevant legislation covering: <ul style="list-style-type: none"> <li>• The energy performance of buildings</li> <li>• Compliance with safe working practices</li> <li>• The relevant regulations in the Devolved Administrations</li> <li>• Where appropriate relevant legislation on the use of refrigerants</li> </ul>
	3.3 Describe the relevant official guidance and conventions relating to the assessment of energy performance
	3.4 Describe your specific responsibilities under prescribed codes of conduct and ethical standards
	3.5 Describe why it is important to comply with mandatory and advisory codes of practice
	3.6 Describe the specific auditing or monitoring requirements that relate to your registration with your accreditation organisation(s), or the equivalent in the Devolved Administrations and your responsibilities in complying with these
	3.7 Describe the framework under which Accreditation Bodies, or the equivalent in the Devolved Administrations, are required to operate, including their Scheme Operating Requirements or equivalent in the Devolved Administrations
	3.8 Explain the importance of obtaining and maintaining appropriate professional indemnity insurance (PII) cover, either through your own business or your employer and the extent and limitations of this type of cover
	4. Be able to comply with organisational and legal requirements at all times
	4.2 Carry out work in accordance with the auditing and monitoring requirements of the relevant accreditation or certification organisation(s)
	4.3 Record customer contact information in accordance with organisational and legal requirements such as the Data Protection legislation
	4.4 Identify and maintain appropriate evidence to record to support your decisions and assumptions made when carrying out energy assessments
	4.5 Identify the evidence requirements defined in Scheme Operating Requirements, or their equivalent in the Devolved Administrations
5. Be able to maintain health, safety and security at work	5.1 Take action to mitigate health, safety and security risks



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	5.2 Ensure personal conduct does not endanger the health, safety and security of self and other people
	5.3 Take action to ensure the protection of client's property and buildings
	5.4 Adhere to workplace policies and suppliers' or manufacturers' instructions for the safe use of equipment, personal protective equipment (PPE), materials and products
	5.5 Identify procedures for different types of emergency and implement them
	5.6 Make recommendations for improving health, safety and security in the workplace to the relevant person(s)
6. Be able to develop and maintain effective working relationships with colleagues, professionals, clients and others	6.1 Develop and maintain productive working relationships with others
	6.2 Request information from colleagues, professionals, clients and others in a polite, clear and professional manner
	6.3 Identify and make use of further sources of information/help
	6.4 Deal with enquiries from colleagues, professionals, clients and others and seek clarification where necessary
	6.5 Handle enquiries which: <ul style="list-style-type: none"> <li>• are outside own authority</li> <li>• are beyond own area of knowledge or expertise</li> <li>• involve confidential information</li> </ul>
	6.6 Handle and resolve disputes and/or differences of opinion
	6.7 Adhere to the formal complaints procedure when dealing with a complaint
7. Be able to conduct energy assessments in a professional manner	7.1 Deal with colleagues, professionals, clients and others in a tactful, courteous and equitable manner
	7.2 Carry out work in accordance with prescribed codes of conduct, ethical standards and recognised good practice
	7.3 Record all evidence supporting the assumptions and decisions made during the assessment
	7.4 Demonstrate effective management of work activities and personal and professional development
	7.5 Respond appropriately to pressure from any person(s), which may affect own judgment
	7.6 Demonstrate delivery of the appropriate level of customer service
	7.7 Assess customer expectations as to the outcomes of the energy assessment or advice process



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## Unit 2: Prepare for energy assessments of non-dwellings to fulfil regulatory requirements for asset ratings

Unit Reference Number: J/503/8168

Level: 3

Credit: 6

### Unit Summary

This unit enables the learner to develop the skills to agree and confirm instructions to undertake energy assessments to meet regulatory and organisational requirements and to investigate relevant matters relating to property and energy usage.

### Assessment Guidance

This unit can be assessed using the following method(s):

- Portfolio of evidence

<b>Learning Outcome The learner will:</b>	<b>Assessment Criterion The learner can:</b>
1. Understand the regulations and requirements needed to undertake energy assessments	1.1 Explain the legislation governing energy assessment and the overall purposes of the Energy Performance Certificate
	1.2 Identify the relevant regulations for energy performance requirements new buildings
	1.3 Identify the relevant regulations for energy performance requirements for existing buildings
	1.4 Describe the types of property and situations that do not by law require energy certification and how to deal with voluntary certification
	1.5 Identify the Building Regulations, EPBD Regulations and other Regulations' energy performance requirements that are relevant to buildings other than dwellings
	1.6 Describe the different stages involved in the energy assessment of new buildings, ensuring compliance with relevant aspects of Building Regulations and leading to the production of the 'as built' assessment, for the purpose of producing an Energy Performance Certificate
	1.7 Review the frequency of energy assessments and the validity of certificates and reports
	1.8 Explain the role of the Energy Performance Certificate in wider government policy including where relevant the Green Deal
2. Understand how to agree and confirm instructions to undertake energy assessments	2.1 Explain how to clarify and confirm the requirements and expectations of the client(s) and the scope of your instructions so that all the information is available and defaults are not used except where justified



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	2.2 Describe how to identify and explain to clients any circumstances that prevent you from undertaking an energy assessment
	2.3 Identify the limitations and constraints that apply to the conduct of energy assessments
	2.4 Explain the importance of explaining and confirming in writing the arrangements agreed between you and client(s)
	2.5 Explain the importance of explaining the terms and conditions and fee structures and payment arrangements for energy assessments
	2.6 Identify the limitations and constraints of the planned energy assessment
	2.7 Explain how to confirm on-site inspection arrangements with the client(s) or other occupier
	2.8 Identify the circumstances that may prevent you from undertaking an energy assessment
	2.9 Explain the importance of explaining politely and clearly to clients the reasons why you cannot undertake an energy assessment
	2.10 Explain the importance of confirming whether any specific arrangements apply to the energy assessment
	2.11 State which software tools have been approved for particular applications
	2.12 Explain the principles of operation of the approved software tools
3. Understand how to investigate relevant matters relating to property and energy usage	3.1 Identify the different types of preparatory information that it is important to obtain to ensure a complete and accurate assessment and certificate
	3.2 Identify the different sources of preparatory information (including existing calculations and energy audit reports) relating to the energy performance of the property
	3.3 Explain how to obtain preparatory information relating to the energy performance of the property
	3.4 Identify prevailing geographical/environmental features that may affect the energy performance of the property
	3.5 Explain how to evaluate relevant information in order to identify any significant factors that may influence the energy assessment, including: <ul style="list-style-type: none"> <li>• Gaps in information concerning the building and its energy use</li> <li>• Health and safety considerations, accessibility</li> <li>• Level of building complexity</li> </ul>



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	3.6 Explain how to identify circumstances that prevent you from assessing the energy performance of the property
	3.7 Explain the importance of explaining to customers why you may not be able to fulfil the agreed contract
4. Be able to agree and confirm instructions to undertake energy assessments	4.1 Determine the nature and characteristics of the property to ensure that it requires an Operational Rating (OR) or Asset Rating as appropriate
	4.2 Respond to requests to undertake energy assessments from clients
	4.3 Clarify and confirm the requirements and expectations of clients and the scope of own instructions to ensure that all the information is available and defaults are not used except where justified
	4.4 Explain to the client the relevant regulations that are legally required and the overall purpose of the Energy Certificate
	4.5 Explain to the client why the Energy Certificate has to conform to prescribed protocols and must be accompanied by cost-effective recommendations
	4.6 Explain to the client the limitations and constraints of the planned energy assessment, identifying any circumstances that prevent the assessment from being undertaken and giving your reasons
	4.7 Agree in writing with the client the terms, conditions and fee structure under which the energy assessment will be undertaken, including the need to take photographs and record other evidence for audit purposes
	4.8 Confirm to clients the terms, conditions and arrangements that have been agreed and confirm in writing any specific arrangements with clients or other occupiers
	4.9 Provide any necessary guidance to clients with regard to the legislation governing energy assessment
	4.10 Select a suitable software tool, appropriate to the building being assessed and approved under the Regulations for energy assessment
5. Be able to investigate relevant matters relating to energy usage within a property	5.1 Investigate and record any preparatory information to ensure complete and comprehensive energy assessment and certification
	5.2 Identify prevailing geographical/environmental features that may affect the energy performance of the property



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	5.3 Evaluate preparatory information to identify inconsistencies and any significant factors that may influence the energy assessment
	5.4 Explain to clients the scope of information that will assist the energy assessment and request any relevant additional information that will be relevant
	5.5 Inform clients promptly in cases where your investigations reveal problems that prevent you from assessing the energy performance of the property
	5.6 Ensure that the most up-to-date version of the approved software and associated reference materials can be accessed



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### Unit 3: Undertake energy assessments of existing Level 3 non-dwellings using the Simplified Building Energy Model (SBEM)

Unit Reference Number: L/503/8169

Level: 3

Credit: 11

#### Unit Summary

This unit will develop the knowledge and skills needed to inspect non-dwellings to determine the energy performance of an existing Level 3 property using SBEM, make recommendations for cost-effective improvements and issue Energy Performance Certificates in compliance with regulatory requirements.

#### Assessment Guidance

This unit can be assessed using the following method(s):

- Portfolio of evidence

<b>Learning Outcome The learner will:</b>	<b>Assessment Criterion The learner can:</b>
1. Understand the equipment and resources needed to undertake energy inspections	1.1 Explain the principles of building structure elements, fabric, services and overall design philosophy as relevant to energy assessment
	1.2 Identify equipment and resources needed to undertake the inspection
	1.3 Explain the detailed inspection requirements that apply to a property as described in relevant guidance documents and Conventions
	1.4 Explain the definitions and conventions embodied within the approved software used to calculate energy performance ratings
	1.5 Identify, from drawings and building structures, the various types of building construction, materials and services
	1.6 Explain how to conduct the inspection in a thorough, methodical and consistent manner
	1.7 Identify the range of measures to improve the energy performance of a property that may be included within an Energy Performance Certificate Recommendations Report
2. Understand the implications of building characteristics affecting the energy performance of a property	2.1 Identify assumptions that are made in determining energy performance
	2.2 State the factors that are relevant to determining the energy performance of a property and those that are deemed not to affect the energy performance of the property
	2.3 Identify and evaluate the relevance of building characteristics which affect the energy performance of a Level 3 building and make it distinct from Level 4



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	2.4 Identify and classify variations in building use and activities, as defined in the Simplified Building Energy Model (SBEM) and its conventions, including the use of planning classifications
	2.5 Describe how much impact building characteristics have on the building's overall energy performance
	2.6 Identify critical property features and activities where incorrect choice of values will be significantly detrimental to accuracy, including: <ul style="list-style-type: none"> <li>• Allocation of the most appropriate activity to zones</li> <li>• Lighting</li> <li>• Choice of default HVAC in zones where none exists</li> <li>• Selection of HVAC efficiency and its allocation to the appropriate zone</li> <li>• Availability of daylight</li> <li>• Presence of Low and Zero Carbon Technologies</li> </ul>
	2.7 Identify the problems that can affect the energy performance of the building fabric and services
	2.8 Review the implications of hazardous building fabric for the energy assessment and reporting
3. Understand how to collate information from the on-site inspection and other sources to assess the energy performance of the property	3.1 Explain how to make accurate observations and take accurate measurements
	3.2 Explain how to make further investigations where observations are inconsistent with existing evidence and expected findings and how to identify the causes of these inconsistencies
	3.3 Explain how to collate information required to assess the energy performance of property
4. Understand how to prepare and issue an Energy Performance Certificate which includes recommendations for cost-effective improvements and meets relevant regulations	4.1 State the prescribed format and content of an Energy Performance Certificate
	4.2 State the range of energy efficiency measures that may be included within an Energy Performance Certificate
	4.3 Identify the approved software used for the production and lodgement of completed Energy Performance Certificates
	4.4 Explain how to correctly use the approved software for the production and lodgement of completed Energy Performance Certificates
	4.5 Explain the principles underpinning the approved tools used to calculate the energy performance ratings
	4.6 Explain how to input data using the approved software in order to determine energy performance ratings
	4.7 Explain how to use approved software to generate energy efficiency measures for the property



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	4.8 Explain the importance of checking that data has been inputted correctly prior to lodgement and how to review data if the calculation will not process or appears incorrect
	4.9 Explain the importance of checking the energy efficiency measures generated prior to lodgement, deleting any that are inappropriate and providing your reasons
	4.10 Explain the way in which energy efficiency measures are generated and circumstances when it is appropriate to delete them
	4.11 Explain the importance of checking the Energy Performance Certificate and energy efficiency measures for the property to ensure they comply with relevant requirements
	4.12 State how to use the information technology underpinning the national register for lodgement and retrieval of Energy Performance Certificates
	4.13 Explain how to provide necessary audit evidence via electronic transfer
5. Understand how to make and maintain complete, accurate and legible records of your work	5.1 Explain the level of detail within your records required to produce a complete and comprehensive Energy Performance Certificate
	5.2 Explain the level of detail within your records required to justify your decisions on the values recorded and energy efficiency measures included
	5.3 State why it is important to make and maintain complete, accurate and legible records
	5.4 Explain the reasons why it is necessary and important to record where and why accurate inspection has not been possible
	5.5 Explain the circumstances in which records can include the fact that information is "unknown" and the evidence required to support the use of defaults in these circumstances
	5.6 Explain the importance of storing records securely allowing for future access and the purposes for which those records may be used
6. Be able to inspect a Level 3 non-dwelling	6.1 Ensure that equipment and resources needed are available for the inspection of Level 3 non-dwellings
	6.2 Identify yourself to those present at the property before commencing inspection
	6.3 Identify and record the method of construction of the property and the main materials used, the installed building services and the activities which take place in the building
	6.4 Use surveying equipment correctly and record and interpret data accurately
	6.5 Identify circumstances when at the property that prevent you continuing with the inspection and explain the reasons to the client(s)
	6.6 Undertake a methodical visual inspection of the property in accordance with the requirements of the approved software and current Conventions



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	6.7 Draw a suitable sketch plan and elevations where none exist
7. Be able to collate information from the on-site inspection and other sources to assess the energy performance of the property	7.1 Make accurate observations and measurements which are necessary to provide data for the calculation of an energy performance rating and production of energy efficiency measures for the property
	7.2 Obtain all additional information that is needed about the property and ensure that defaults are not used except where justified
	7.3 Identify where observations are inconsistent with existing evidence and expected findings and conduct further investigations to establish the causes of these inconsistencies
	7.4 Identify critical property features and activities where incorrect choice of values will be significantly detrimental to accuracy and take appropriate steps to correctly represent these features to arrive at an accurate assessment of the property
	7.5 Follow the correct procedures for collecting information to enable the energy efficiency of the property to be determined
8. Be able to prepare and issue an Energy Performance Certificate which includes recommendations for energy efficiency measures and meets relevant regulations	8.1 Describe the prescribed format and content of an Energy Performance Certificate
	8.2 Explain the way in which energy efficiency measures are generated and circumstances when it is appropriate to delete them
	8.3 Use approved software correctly to determine energy performance ratings and to generate energy efficiency measures for the property
	8.4 Check that data has been inputted correctly prior to lodgement and review data if calculations do not work or if the result appears incorrect
	8.5 Recognise a result that is unlikely to be correct for the property in question
	8.6 Check the Energy Performance Certificate and energy efficiency measures prior to lodgement, ensuring compliance with relevant requirements and make any necessary amendments
	8.7 Take the necessary corrective action where any of your checks indicate a possible incorrect data entry or error in the resulting rating or energy efficiency measures
	8.8 Use the information technology underpinning the national register for lodgement and retrieval of Energy Performance Certificates
	8.9 Lodge Energy Performance Certificates on the prescribed national databank on completion
	8.10 Provide necessary audit evidence via electronic transfer 5
9. Be able to make and maintain complete, accurate and legible records of your work	Produce and maintain accurate and legible records of your findings, which are clear, complete and conform to accepted professional and statutory requirements, including investigations carried out, values recorded and options considered



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	Keep detailed records which ensure that you can produce a complete and comprehensive Energy Performance Certificate and justify your decisions on values recorded and energy efficiency measures selected
	Collate information as evidence to support the specific decisions made on values chosen and energy efficiency measures considered, including: <ul style="list-style-type: none"> <li>• Legible site notes</li> <li>• Clear site sketches (plan, elevation) to give an adequate record of the inspection for audit purposes</li> <li>• Clear photographs containing mandated data appropriately staged and annotated where necessary</li> <li>• Legibly completed survey forms records of web searches or other research</li> <li>• Any other information you consider necessary to support your decisions</li> <li>• Any other information required by Scheme Operating Requirements</li> </ul>
	9.4 Explain the circumstances in which records can include the fact that information is “unknown” and the evidence required to support the use of defaults in these circumstances
	9.5 Store records securely allowing for future access and state the purposes for which your records may be used



## Unit 4: Report on the energy assessment of new and existing non-dwellings using Simplified Building Energy Model SBEM

Unit Reference Number: L/503/8172

Level: 4

Credit: 7

### Unit Summary

This unit aims to develop the knowledge and skills needed to prepare a report on the energy assessment of existing non-dwellings using Simplified Energy Model (SBEM)

### Assessment Guidance

This unit can be assessed using the following method(s):

- Portfolio of evidence

<b>Learning Outcome The learner will:</b>	<b>Assessment Criterion The learner can:</b>
1. Understand how to produce Recommendations Reports for non-dwellings using SBEM	1.1 Describe the prescribed format and content of an Energy Performance Certificate Recommendations Report
	1.2 Identify the range of energy efficiency measures that may be included within an Energy Performance Certificate Recommendations Report
	1.3 State the approved software used to generate energy efficiency measures for the property
	1.4 Explain the principles underpinning the approved software used to calculate energy ratings and produce Recommendations Reports
	1.5 Explain how to correctly use the approved software to produce Energy Performance Certificates
	1.6 Explain the importance of checking that data has been inputted correctly and how to review data if the calculation will not process or if the result appears incorrect
	1.7 Explain the effect of choosing default data options on the energy efficiency measures offered by SBEM
	1.8 Explain how to check the Energy Performance Certificate Recommendations Report for cost-effective improvement, ensuring compliance with relevant requirements and conventions



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	1.9 Identify the level of detail within your records required to produce a complete and comprehensive Recommendations Report and justify your decisions on the values recorded and energy efficiency measures selected
	1.10 Explain the importance of making and maintaining records that are complete, accurate and legible
	1.11 Explain the reasons why it is necessary and important to record where and why accurate inspection has not been possible
	1.12 Identify the circumstances in which records can include the fact that information is "unknown" and the evidence required to support this choice
	1.13 Explain the importance of storing records securely allowing for future access and the purposes for which your records may be used
2. Understand how to provide a clearly defined and robust hierarchy of energy efficiency measures for non-dwellings	2.1 Explain how to use approved software to generate energy efficiency measures for the property
	2.2 Explain the way in which energy efficiency measures are generated and circumstances when it is appropriate to delete them
	2.3 Explain the importance of checking the energy efficiency measures generated, deleting any that are inappropriate, and providing your reasons
	2.4 Identify the factors that could affect the choice of energy efficiency measures for improvements to the property, including: <ul style="list-style-type: none"> <li>• Issues that make them unsuitable for the property</li> <li>• Interactions between building fabric and building services</li> <li>• Listed building status/conservation areas</li> </ul>
	2.5 Identify the issues that could make energy efficiency measures unsuitable for the property, including: <ul style="list-style-type: none"> <li>• Property situation e.g. subject to extreme weather</li> <li>• Property condition e.g. state of repair of external walls</li> <li>• Inadequate ventilation</li> <li>• Traditional construction</li> <li>• Any other features of the property, or its site/location, which might adversely affect the performance of the recommended improvement, or the building's performance after improvement</li> </ul>
	2.6 Explain how to make appropriate deletions/amendments based on the practical and economic feasibility for the building under consideration



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	2.7 Identify current typical costs of energy efficiency measures
	2.8 Explain how to estimate typical costs, for the particular building, of any proposed energy efficiency measures
	2.9 Explain how to assess the carbon impact and payback period of energy efficiency measures in order to provide an hierarchy of improvement measures
	2.10 Identify the data and information required to be lodged on the relevant central register
	2.11 Identify appropriate advice on the implementation of the energy efficiency measures that may be given to the client
3. Understand how to communicate the value of a Recommendations Report and how it can be used	3.1 State the objective of producing Recommendations Reports
	3.2 Explain the difference between high, medium and low carbon impact energy efficiency measures and the scale of savings that each may achieve
	3.3 Identify which elements have greater impact on the energy performance of the building in question and why
	3.4 Explain how estimates of costs for energy efficiency measures have been arrived at and how robust they are
	3.5 Explain how to communicate and explain the energy efficiency measures to the client
	3.6 Explain the importance of retaining documentation for audit purposes or legal compliance
	3.7 Explain how to convey essential information in a written report in a way which will be comprehensible to the client
	3.8 Identify where to refer clients for further help and advice
4. Be able to produce Recommendations Reports for non-dwellings using SBEM	4.1 Use approved software to generate energy efficiency measures that improve energy performance
	4.2 Check the Recommendations Report, ensuring compliance with relevant requirements and current conventions
	4.3 Produce and maintain accurate and legible records which are clear, complete and conform to accepted professional and statutory requirements to include: <ul style="list-style-type: none"> <li>• Records investigations carried out</li> <li>• Values recorded</li> <li>• Options considered</li> </ul>



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	4.4 Record information at a sufficient level of detail to produce a complete and comprehensive Energy Performance Certificate and justify your decisions on values recorded and energy efficiency measures selected
	4.5 Describe the circumstances in which records can include the fact that information is "unknown" and the evidence required to support this choice
	4.6 Store records securely allowing for future access and explain the purposes for which the records may be used
5. Be able to provide a clearly defined and robust hierarchy of energy efficiency measures for non-dwellings	5.1 Use the approved software to generate energy efficiency measures to improve energy performance
	5.2 Explain the effect of choosing default data options on the energy efficiency measures offered by SBEM
	5.3 Check the energy efficiency measures generated and make appropriate deletions, additions and amendments based on the practical and economic feasibility for the building under consideration, providing and documenting your reasons
	5.4 Identify the factors that could affect the choice of energy efficiency measures for improvements to the property, including issues that make them unsuitable for the property, interactions between building fabric and building services and listed building status/conservation areas
	5.5 Identify the relative costs of any energy efficiency measures which may be proposed
	5.6 Provide a hierarchy of improvement measures based on carbon impact and payback period
	5.7 Identify the data and information required to be lodged on the relevant central register and show understanding of the lodging procedures
	5.8 Produce a valid Recommendations Report, in accordance with approved guidance
	5.9 Provide initial advice on the implementation of the recommendations made
6. Be able to communicate the value of a Recommendations Report and how it can be used	6.1 Explain to clients the objective of producing Recommendations Reports
	6.2 Explain to clients the difference between high, medium and low carbon impact measures, giving examples of the scale of savings which may be achieved by each



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	6.3 Explain to clients which recommendations have greater impact on the energy performance of the building in question and why
	6.4 Explain to clients how estimates of costs for energy efficiency measures have been arrived at and how robust they are
	6.5 Explain energy efficiency measures to the client
	6.6 Understand the importance of retaining documentation for audit purposes or legal compliance
	6.7 Highlight the essential information contained in the Recommendations Report in a way which will be comprehensible to the client



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## Unit 5: Provide information to customers on the principles, financing and operation of the Green Deal

Unit Reference Number: T/503/8179

Level: 3

Credit: 4

### Unit Summary

This unit is about demonstrating a general understanding of the overall purpose of the Green Deal and how it operates and is financed.

### Assessment Guidance

This unit can be assessed using the following method(s):

- Portfolio of evidence

<b>Learning Outcome The learner will:</b>	<b>Assessment Criterion The learner can:</b>
1. Understand the components of the Green Deal	1.1 Describe the role of Green Deal in improving energy efficiency and reducing energy consumption
	1.2 Identify sources of information about Green Deal and how they are accessed by customers
	1.3 Identify who is eligible for the Green Deal and the restrictions that apply
	1.4 Identify the different types of tenure which affect the status of individuals
	1.5 Identify the different processes to be undertaken relevant to different types of tenure
	1.6 Identify the main roles and responsibilities of: <ul style="list-style-type: none"> <li>• the Green Deal Adviser</li> <li>• the Green Deal Provider</li> <li>• the Green Deal Installer</li> </ul>
	1.7 Explain the function of the Energy Performance Certificate and how it contributes to the Green Deal process
	1.8 Identify the eligible measures which can be funded under Green Deal
	1.9 Explain how the Green Deal is financed and repaid
	1.10 Explain the Golden Rule and its role in establishing the financial offer in Green Deal
	1.11 Explain how customers can access information about Green Deal Installers and Providers
2. Understand how to provide high quality,	2.1 Explain the components of the Green Deal Code of Practice including its impact on the service delivered to customers



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independent and impartial advice to customers	2.2 Explain the ways of providing impartial advice and recommendations within Green Deal
	2.3 Explain the legal safeguards available to customers in relation to mis-selling, credit agreements and redress for complaints
	2.4 Explain the support available to eligible customers through the Energy Company Obligation subsidy and heating and other fuel benefits
	2.5 Explain the permissions, consents and disclosure requirements operating in relation to Green Deal
	2.6 Explain the specific protections and support available for vulnerable groups and customers under Green Deal
	2.7 Explain the ways in which Green Deal can operate for rural customers, those who are off the gas grid and for traditional properties
	2.8 Identify energy efficiency measures, support and finance mechanisms outside the Green Deal
	2.9 Explain how customers can access information about energy efficiency measures, support and finance mechanisms outside the Green Deal
	3. Be able to provide customers with information on Green Deal to meet their needs
3.2 Identify for customers where further information and support about Green Deal can be accessed by customers	
3.3 Explain to customers the role of the Green Deal Adviser and how they provide impartial advice and recommendations to customers	
3.4 Inform the customer of their rights and protections under law in relation to Green Deal	
3.5 Explain to customers how the assessment of energy performance is undertaken and the role of that assessment in the Green Deal process	
3.6 Explain to customers the energy efficiency measures that can be funded through the Green Deal funding	
3.7 Explain to customers the long term nature of cost savings arising from the installation of energy saving measures	
3.8 Explain to customers how the funding offer is arrived at and who can provide financing	
3.9 Explain to customers the role of the Green Deal provider as the funding agency	
3.10 Explain to customers the role of the energy suppliers as collectors of payment via the energy bill	
3.11 Explain to customers the permissions and consents that are required in order to take up Green Deal	
3.12 Explain to customers the Energy Company Obligation subsidy and the eligibility criteria for it	
3.13 Explain to customers the heating and other fuel benefits that may be available under Green Deal and the eligibility criteria for them	



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	3.14 Provide information to customers on the Feed in Tariffs and Renewable Heat Incentive mechanisms and how they operate within Green Deal
	3.15 Explain to customers the impact of special requirements in relation to rural location, those off the gas grid or in traditional properties
	3.16 Respond to customer queries and signpost them to other information and services when required



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## Unit 6: Carry out non-domestic energy inspections to determine an Operational Profile and give advice

Unit Reference Number: K/504/0964

Level: 4

Credit: 10

### Unit Summary

This unit is about conducting non-domestic energy inspections, producing an operational profile and advising on energy reduction.

### Assessment Guidance

This unit can be assessed using the following method(s):

- Portfolio of evidence

<b>Learning Outcome The learner will:</b>	<b>Assessment Criterion The learner can:</b>
1. Understand the process of conducting an operational profile	1.1 Identify the data that is required from the customer to enable an analysis of non-domestic energy consumption for the purposes of Green Deal in accordance with the prescribed methodology
	1.2 Explain the methods used to obtain data and information and the potential sources of that information
	1.3 Identify how to carry out a methodical visual on-site inspection of a property in order to produce an operational profile assessment
	1.4 Identify the requirements of the prescribed methodology for the operational profile
	1.5 Explain the appropriateness of the use of the Simplified Building Energy Model (SBEM) methodology and software for different building types and state where the Dynamic Simulation Model (DSM) methodology should be used instead
	1.6 Specify the definitions and conventions that apply to the prescribed methodology for operational profile assessment
	1.7 Describe how to identify gaps in information gathered and any additional data required to fill them
	1.8 Identify where it would be appropriate to request advice from a specialist
	1.9 Describe how to assess the likely current energy performance of any property elements compared to its performance as originally built
	1.10 Describe the impact of the following on the energy assessment process: <ul style="list-style-type: none"> <li>• the durability of materials and systems over time</li> <li>• the functioning of building services</li> </ul>



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	1.11 Describe how to deal with any ad hoc health and safety issues at the time of inspection
	1.12 Explain the data protection requirements relating to customer's data
	1.13 Describe the requirements of Codes of Practice and other guidance as they apply to the operational profile process
	1.14 Describe how to apply the management score in order to reflect the quality of the building's management
2. Understand the factors and measures for reducing energy consumption in non-domestic buildings	2.1 Explain how to establish the customer's situation in respect of reducing energy consumption including: <ul style="list-style-type: none"> <li>• Needs</li> <li>• Circumstances</li> <li>• Motivations</li> <li>• Capabilities</li> <li>• Managerial and other constraints</li> <li>• Potential barriers to action</li> </ul>
	2.2 Describe the key metrics by which energy consumption is measured and recorded
	2.3 Explain how to track energy consumption over time and identify significant trends in usage
	2.4 Describe the types of further investigations that can be carried out where data inconsistencies are discovered
	2.5 Explain the alternative methods for optimising the use of existing plant, equipment and consumables
	2.6 Explain how the current occupier's activities, systems and processes affect energy consumption and fuel bills
	2.7 Identify the alternative activities, systems and processes that would enhance energy efficiency and carbon reduction in relation to: <ul style="list-style-type: none"> <li>• Energy purchase and supply</li> <li>• Heating</li> <li>• Lighting</li> <li>• Air conditioning</li> <li>• Small power</li> <li>• Refrigeration</li> <li>• Building fabric</li> <li>• Passive strategies and processes</li> <li>• Ventilation</li> </ul>
	2.8 Explain the main methods and products used for: <ul style="list-style-type: none"> <li>• Controlling and managing the use of water</li> <li>• Managing waste through re-use and recycling methods</li> </ul>
	2.9 Describe how to evaluate alternatives against the constraints of the building and finances available
	2.10 Identify the sources of information and agencies providing advice and financial support for energy and carbon reduction



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	2.11 Describe the legal and regulatory framework relating to energy efficiency and carbon reduction including national and international requirements
	2.12 Identify the limitations on the advice provided in the Green Deal Advisory Report
	2.13 Identify the circumstances where it is necessary to refer customers for specialist assessments of building fabric or services and how to choose a suitable specialist assessor
	2.14 Describe the types of questions, issues and concerns that clients might have about the operational profile visit and the operational advice given
	2.15 Identify the sources of information to which the customer can be referred for further help and advice
3. Understand the written records required for inspection findings	3.1 Describe the methods, formats and conventions for recording information and evidence on the operational profile
	3.2 Identify the required range of information and evidence relating to the assessment, as defined by the current operational profile methodology and any associated guidance and conventions
	3.3 Define the level of detail required to produce a complete and comprehensive non-domestic Green Deal Advice Report
	3.4 Explain how records can be used to justify decisions on the values recorded and the advice given
	3.5 Identify the circumstances in which records can include the fact that information is "unknown" and the evidence required to support this choice
	3.6 Explain the importance of storing information and records securely for future access and to meet Certification Scheme inspection requirements
	3.7 State the purposes for which records may be used
4. Be able to conduct an operational profile assessment	4.1 Explain to customers the information required for the operational profile assessment
	4.2 Use appropriate methods to obtain such information from customers
	4.3 Confirm that the customer is the person responsible for the property's fuel bills and has the authority to take action under the Green Deal
	4.4 Gather the necessary data and information from appropriate documentation to enable the operational profile assessment to take place
	4.5 Undertake a methodical visual inspection of the property in accordance with the prescribed methodology for the operational profile
	4.6 Determine how the current condition of the property may affect its energy performance
	4.7 Determine the management score reflecting the quality of the building's management



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5. Be able to identify actions to reduce energy consumption in non-domestic buildings	5.1 Establish the needs, tenure, access to capital and motivations of the customer in relation to energy consumption reduction
	5.2 Identify any constraints that might affect the customer's ability to act
	5.3 Identify areas of significant energy consumption and any trends and changes in energy use
	5.4 Compare data with operational performance and establish the reasons for any differences
	5.5 Establish any anticipated changes to energy consumption and their implications
	5.6 Review current activities, systems, processes and behaviours that affect energy efficiency and carbon emissions and their impact on energy consumption and fuel bills
	5.7 Review alternative activities, systems, processes and behaviours that would enhance energy performance
	5.8 Identify changes to activities, systems, processes and behaviours that could be made which are in scope of Green Deal provision
	5.9 Establish ways of improving the monitoring and measurement of operational energy usage including metering and sub-metering
	5.10 Identify financial incentives and schemes to support energy efficiency and carbon reduction relevant to the actions being considered
	5.11 Identify any legal requirements that impact on energy use and carbon emissions and their impact on the actions being considered
	5.12 Provide impartial advice when identifying effective actions to reduce operational energy consumption and achieve carbon reduction
	5.13 Identify situations where specialist assessment is required and the basis on which specialist are selected
	5.14 Provide customers with a clear explanation of their current energy consumption and trends in consumption
	5.15 Provide customers with a clear explanation of the impact on their current activities, systems, processes and behaviours on energy consumption and fuel bills
	5.16 Provide customers with a clear explanation of alternative activities, systems, processes and behaviours that would enhance energy performance
	5.17 Provide customers with a clear explanation of the financial incentives and support for making changes to energy consumption and how they can be accessed
	5.18 Provide customers with a clear explanation of any specialist assessments required and how to access them
	5.19 Provide customers with a clear explanation of the recommendations made in the Green Deal Advice Report



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	<p>5.20 Provide information on the methods and products for achieving:</p> <ul style="list-style-type: none"> <li>• efficient management of water usage and minimisation of wastes</li> <li>• • waste reduction, re-use and re-cycling</li> </ul>
	<p>5.21 Advise the customer on the limitations on the advice given within the Green Deal Advice Report</p>
	<p>5.22 Respond to customer queries, issues and concerns about the operational profile and the operational advice given</p>
<p>6. Be able to maintain written records of inspection findings</p>	<p>6.1 Create and maintain complete, accurate and legible records of findings including:</p> <ul style="list-style-type: none"> <li>• Investigations carried out</li> <li>• Values recorded</li> <li>• Options considered</li> <li>• • Reasons why "unknown" is used against data fields and why this was unavoidable</li> </ul>
	<p>6.2 Record information in sufficient detail to produce a complete and comprehensive non-domestic Green Deal Advice Report and justify decisions on how values were arrived at and the nature of the advice</p>
	<p>6.3 Record where information cannot be obtained and where data is recorded as "Unknown" and why this action was unavoidable</p>
	<p>6.4 Catalogue, secure and store records for the prescribed periods of time</p>
	<p>6.5 Ensure that records can be accessed for future use</p>



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## Unit 7: Prepare and issue non-domestic Green Deal Advice Reports

Unit Reference Number R/503/8190

Level: 4

Credit: 9

### Unit Summary

This unit is about preparing and issuing Green Deal Advice Reports for non-domestic customers.

### Assessment Guidance

This unit can be assessed using the following method(s):

- Portfolio of evidence

<b>Learning Outcome The learner will:</b>	<b>Assessment Criterion The learner can:</b>
1. Understand the process of inputting data for Non-domestic Green Deal Advice Reports	1.1 Describe the prescribed format and content of a Non-domestic Green Deal Advice Report
	1.2 Identify the approved software options available and how to choose software that is appropriate to the type of assessment being carried out
	1.3 Identify the information required to produce a compliant Non-domestic Green Deal Advice Report
	1.4 Describe the principles underpinning the approved software used to prepare a Non-domestic Green Deal Advice Report
	1.5 Describe how to input data into the approved software to produce Non-domestic Green Deal Advice Reports
	1.6 Identify common areas of potential uncertainty or insufficient information which could affect value attribution
	1.7 Describe the quality assurance checks to conduct on information to ensure that: <ul style="list-style-type: none"><li>• Values are correct</li><li>• Energy efficiency measures are realistic and appropriate for the subject property</li></ul>
	1.8 Describe the circumstances in which items can be recorded as "unknown" as defined by conventions
	1.9 Explain the consequences of recording an item as "unknown" or as built on the methodology's assessment process
	1.10 Describe the ways of gathering more information to avoid the use of default values
	1.11 Describe the conventions used in non-domestic Green Deal advice assessment and the implications on the process when these change



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	1.12 Describe how to check the accuracy of inputted data
	1.13 Describe how to review data when the calculation will not process
	1.14 Describe how to incorporate outputs from specialist assessments
	2.1 Identify the range of energy efficiency measures that may be included within a Non-domestic Green Deal Advice Report
	2.2 Describe the relationship between the building fabric and building services and the impact on energy, the energy assessment process and energy efficiency measures proposed
	2.3 Explain the way in which energy efficiency measures are generated by approved software
	2.4 Explain how to check the energy efficiency measures generated automatically by the approved software
	2.5 Explain how to amend by deleting inappropriate energy efficiency measures for the property and customer
	2.6 Describe how to use approved software to evaluate energy efficiency measures that are bespoke to the property and its current occupier
	2.7 Explain how the current building energy consumption is taken into account when identifying energy efficiency measure likely to deliver the most savings to the customer
	2.8 Explain how to select energy efficiency measures to evaluate using approved software and how to ensure they are feasible, practical and appropriate for the property and customer
	2.9 Identify current typical costs of energy efficiency measures and explain how to estimate typical costs, for the particular building, of the proposed energy efficiency measures
	2.10 Describe how the approved software estimates the cost savings from energy efficiency measures
	2.11 Describe how to amend ascribed default values in accordance with the operational profile
	2.12 Explain how to adjust estimated savings in accordance with the operational profile and current fuel tariffs to provide figures to be used in the Green Deal Principle (Golden Rule) calculation estimates
	2.13 Explain how to normalise metrics between the Energy Performance Certificate and energy consumption data to improve the estimates of energy savings from energy efficiency measures
	2.14 Explain how the Green Deal Principle (Golden Rule) is calculated and how measures are assessed against the Golden Rule
3. Understand how to lodge and issue Non-domestic Green Deal Advice Reports	3.1 Explain the importance of fully disclosing any referral fees or other benefits received in relation to suggested products, services and suppliers



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	3.2 Explain the process of lodging and issuing a Non-domestic Green Deal Advice Report
	3.3 Identify the level and detail of information storage required in relation to Non-domestic Green Deal Advice Reports
	3.4 Explain how to update the Energy Performance Certificate after the installation of agreed energy efficiency measures
4. Be able to input data to prepare Non-domestic Green Deal Advice Reports	4.1 Assemble and collate information required including any pre-existing Energy Performance Certificate or Display Energy Certificate
	4.2 Choose from approved software options a software package which is appropriate to the type of assessment being carried out
	4.3 Use the approved software to prepare Non-domestic Green Deal Reports
	4.4 Ensure that values entered for all components are accurate
	4.5 Identify areas of potential uncertainty or insufficient information which could affect value attribution and carry out checks to avoid likely errors
	4.6 Carry out further investigations to identify appropriate values in order to reduce or eliminate use of default values and the "unknown" option, including requesting advice from a specialist where appropriate
	4.7 When the use of default values or "unknown" is unavoidable, explain why this was the case and the steps taken to try to avoid their use, in accordance with relevant conventions and Code of Practice
5. Be able to assess energy efficiency measures for the non-domestic Green Deal Advice report	5.1 Identify ways of optimising the efficiency of current plant and equipment in relation to heating, lighting and air conditioning
	5.2 Generate energy efficiency measures which are feasible, practical and appropriate for the property using the approved software and the guidance or conventions applying to its use
	5.3 Identify energy efficiency measures which take account of: <ul style="list-style-type: none"> <li>• The interaction between the building fabric and the building services</li> <li>• Building location</li> <li>• Needs, circumstances and motivations of the customer</li> </ul>
	5.4 Evaluate the feasibility, practicality and relevance of alternatives in relation to the fabric of the building and the building services
	5.5 Establish the relative costs of any energy efficiency measures which may be proposed
	5.6 Provide impartial advice when identifying effective energy efficiency measures



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	<p>5.7 Use approved software to:</p> <ul style="list-style-type: none"> <li>• estimate energy use and associated energy costs</li> <li>• estimate energy and cost savings from energy efficiency measures</li> <li>• adjust the assumed defaults in accordance with the operational profile and fuel prices to reflect actual tariffs</li> <li>• produce figures to be used in the non-domestic Green Deal (Golden Rule) calculation</li> <li>• assess which energy efficiency measures or packages of measures are likely to be eligible for Green Deal finance</li> <li>• normalise metrics between the Energy Performance Certificate and energy consumption data to improve the estimates of energy savings from energy efficiency measures</li> </ul>
	<p>5.8 Prepare Non-domestic Green Deal Advice Reports that meet scheme requirements and certification body requirements</p>
	<p>5.9 Incorporate outputs from any specialist assessment(s) in the Non-domestic Green Deal Advice Report</p>
	<p>5.10 Disclose any referral fees or other benefits to be received should the customer follow suggestions for particular products, services or suppliers</p>
<p>6. Be able to prepare, lodge and issue Non-domestic Green Deal Advice Reports</p>	<p>6.1 Identify the legal requirements which impact on energy use and carbon emissions and their impact on energy efficiency measures being considered</p>
	<p>6.2 Where specialist assessment is required, record the choice of specialist and the basis for this choice, retaining evidence of their suitability to undertake the specialist assessment in the property</p>
	<p>6.3 Explain to the client how the energy efficiency measures are assessed against the Golden Rule and that this is done at the quoting stage</p>
	<p>6.4 Check the Non-domestic Green Deal Advice Report to ensure it is clear and complete</p>
	<p>6.5 Collate and maintain information in support of:</p> <ul style="list-style-type: none"> <li>• Investigations carried out</li> <li>• Values attributed</li> <li>• Energy efficiency options considered</li> <li>• Energy efficiency options rejected with justification</li> <li>• Specific decisions made and energy efficiency measures proposed</li> </ul>
	<p>6.6 Follow the procedure for lodging Non-domestic Green Deal Advice Reports on the prescribed national register</p>



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	6.7 Issue Non-domestic Green Deal Advice Reports to customers
	6.8 Follow the procedure for updating the Energy Performance Certificate after the installation of agreed energy efficiency measures
	6.9 Maintain internal records which are clear, complete and meet Green Deal and statutory requirements and follow accepted professional standards



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## Unit 8: Explain the Green Deal Advice Report to the non-domestic customer

Unit Reference Number: Y/503/8191

Level: 4

Credit: 4

### Unit Summary

This unit is about explaining the Green Deal Advice Reports to non-domestic customers.

### Assessment Guidance

This unit can be assessed using the following method(s):

- Portfolio of evidence

<b>Learning Outcome The learner will:</b>	<b>Assessment Criterion The learner can:</b>
1. Understand the process of explaining the Green Deal Advice Report to non-domestic customers	1.1 Describe the requirements of the Green Deal Code of Practice in respect of issuing the Green Deal Advice Report to customers and the professional responsibilities and liabilities in the giving of advice and any disclaimers that should be made
	1.2 Identify the difference between high, medium and low carbon impact energy efficiency measures and the scale of savings that each may achieve
	1.3 Explain which energy efficiency measures have the greatest impact on the energy performance of a building and explain why
	1.4 Describe the benefits of installing energy efficiency measures as a package and the importance of the sequence of installation
	1.5 Explain how estimates of costs are arrived at and how robust they are and for how long they will be valid
	1.6 Identify the different circumstances and requirements of rural customers and those living in traditional buildings
	1.7 Explain the impact of how the building is managed on the potential energy savings and actual costs
	1.8 Identify the specific advice needed to implement recommendations
	1.9 Explain the funding options available and the eligibility requirements of the Green Deal finance package
	1.10 Establish the critical factors for the customer in deciding which measures to pursue including economic and operational circumstances
	1.11 Identify ways of creating a clear demarcation between the independent and impartial stage of the process and the declaration of any links to providers and/or suppliers



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	1.12 Explain the next steps in the process, the key individuals and organisations involved and how to contact them and how to provide impartial information
	1.13 Explain how to disclose links to suppliers of products and services in a manner that ensures the customer understands the implications of your further engagement in the Green Deal process
2. Be able to explain the components of the Green Deal Advice Report and their implications to the Non-domestic customer	2.1 Explain the hierarchy of energy efficiency measures based on carbon impact and payback
	2.2 Explain the difference between high, medium and low carbon impact efficiency measures and the relative scale of savings which may be achieved
	2.3 Explain which energy efficiency measures have greater impact on the energy performance of a building
	2.4 Explain the relationship between: <ul style="list-style-type: none"> <li>the Energy Performance Certificate asset rating based on standard assumptions</li> <li>the Display Energy Certificate operational rating based on metered fuel use</li> <li>the estimated savings based on the current use of the building</li> </ul>
	2.5 Explore the merits and demerits of the proposed energy efficiency measures
	2.6 Identify ways of overcoming any barriers to implementing the energy efficiency measures
	2.7 Explain the benefits of installing several measures as part of a package and the advantage of correctly sequencing the installation
	2.8 Explain how estimates of running costs have been arrived at, how robust they are and for how long they are valid
	2.9 Explain the gap between standard savings and likely savings based on occupancy
	2.10 Identify ways in which the recommendations can be implemented and where to go for help
	2.11 Provide information on how the management of the building and its services can impact on energy savings and costs
	2.12 Indicate how any future changes in energy consumption and costs not included in the assessment may impact on savings
	2.13 Explain any relevant incentives for the customer adopting the proposed Green Deal package of energy measures
	2.14 Explain any likely limitations on customer choice in respect of brands and appearance of equipment and materials that installers will provide in implementing the package of measures
	2.15 Explain the funding options available and how to apply for funding



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3. Be able to prepare and present a Green Deal Advice Report in a professional and impartial manner	3.1 Provide precise disclosure of the limitations on the advice being given
	3.2 Make clear the impartial technical advice being provided up to this point
	3.3 Explain to the customer the extent of personal responsibility for the recommendations made, including appropriate disclaimers
	3.4 Inform the customer of any fees that the Green Deal Adviser may receive if the customer follows the advice given in relation to one or more energy efficiency measure
	3.5 Explain any specific links with suppliers of Green Deal products and services and that any further involvement in the process will involve exclusive promotion of the products and services of those suppliers
	3.6 Inform the customer of the Green Deal Code of Practice that regulates the preparation and issuing of the Green Deal Advice Report
	3.7 Make clear the roles and responsibilities of the various parties involved in the Green Deal and who may be involved in the next stages of the process
	3.8 Make the customer aware of responsibilities to future occupiers in terms of potential changes in energy savings should energy saving features be removed
	3.9 Respond to customer questions, issues and concerns in relation to the Green Deal Advice Reports and the next steps in the process within the limits of personal expertise and knowledge
	3.10 Identify the specific needs of customers including those in rural locations, those off the gas grid or occupying traditional buildings



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## Unit 9: Undertake energy assessments of existing Level 4 non-dwellings using the Simplified Building Energy Model SBEM

Unit Reference Number: F/503/8170

Level: 4

Credit: 13

### Unit Summary

This unit will help to develop the knowledge and skills needed to inspect non-dwellings to determine the energy performance of an existing Level 4 property, using the Simplified Building Energy Model, make recommendations for cost-effective improvements and issue Energy Performance Certificates in compliance with regulatory requirements.

### Assessment Guidance

This unit can be assessed using the following method(s):

- Portfolio of evidence

<b>Learning Outcome The learner will:</b>	<b>Assessment Criterion The learner can:</b>
1. Understand the equipment and resources needed to undertake energy inspections	1.1 Explain the principles of building structure elements, fabric, services and overall design philosophy as relevant to energy assessment
	1.2 Identify equipment and resources needed to undertake the inspection
	1.3 Explain the detailed inspection requirements that apply to a property as described in relevant guidance documents and Conventions
	1.4 Explain the definitions and conventions embodied within the approved software used to calculate energy performance ratings
	1.5 Identify, from drawings and building structures, the various types of building construction, materials and services
	1.6 Explain how to conduct the inspection in a thorough, methodical and consistent manner
	1.7 Identify the range of measures to improve the energy performance of a property that may be included within an Energy Performance Certificate Recommendations Report
2. Understand the implications of building characteristics affecting the energy performance of a property	2.1 Identify assumptions that are made in determining energy performance
	2.2 State the factors that are relevant to determining the energy performance of a property and those that are deemed not to affect the energy performance of the property



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	2.3 Identify and evaluate the relevance of building characteristics which affect the energy performance of a Level 4 building and make it distinct from Level 3 or Level 5
	2.4 Identify and classify variations in building use and activities, as defined in the Simplified Building Energy Model (SBEM) and its conventions, including the use of planning classifications
	2.5 Describe the relative sensitivity of the different building characteristics that affect the energy performance of the building structure and fabric
	2.6 Identify critical property features and activities where incorrect choice of values will be significantly detrimental to accuracy, including: <ul style="list-style-type: none"> <li>• Allocation of the most appropriate activity to zones</li> <li>• Lighting</li> <li>• Choice of default HVAC in zones where none exists</li> <li>• Selection of HVAC efficiency and its allocation to the appropriate zone</li> <li>• Availability of daylight and presence of Low and Zero Carbon Technologies</li> </ul>
	2.7 Identify the problems that can affect the energy performance of the building fabric and services
	2.8 Review the implications of hazardous building fabric for the energy assessment and reporting
3. Understand how to collate information from the on-site inspection and other sources to assess the energy performance of the property	3.1 Explain how to make accurate observations and take accurate measurements
	3.2 Explain how to make further investigations where observations are inconsistent with existing evidence and expected findings and how to identify the causes of these inconsistencies
	3.3 Explain how to collate information required to assess the energy performance of property
4. Understand how to prepare and issue an Energy Performance Certificate which includes recommendations for cost-effective improvements and meets relevant regulations	4.1 State the prescribed format and content of an Energy Performance Certificate
	4.2 State the range of energy efficiency measures that may be included within an Energy Performance Certificate
	4.3 Identify the approved software used for the production and lodgement of completed Energy Performance Certificates
	4.4 Explain how to correctly use the approved software for the production and lodgement of completed Energy Performance Certificates
	4.5 Explain the principles underpinning the approved tools used to calculate the energy performance ratings



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	4.6 Explain how to input data using the approved software in order to determine energy performance ratings
	4.7 Explain how to use approved software to generate energy efficiency measures for the property
	4.8 Explain the importance of checking that data has been inputted correctly prior to lodgement and how to review data if the calculation will not process or appears incorrect
	4.9 Explain the importance of checking the energy efficiency measures generated prior to lodgement, deleting any that are inappropriate, and providing your reasons
	4.10 Explain the way in which energy efficiency measures are generated and circumstances when it is appropriate to delete them
	4.11 Explain the importance of checking the Energy Performance Certificate and energy efficiency measures for the property to ensure they comply with relevant requirements
	4.12 Explain how to use the information technology underpinning the national register for lodgement and retrieval of Energy Performance Certificates
	4.13 Explain how to provide necessary audit evidence via electronic transfer
5. Understand how to make and maintain complete, accurate and legible records of your work	5.1 Explain the level of detail within your records required to produce a complete and comprehensive Energy Performance Certificate
	5.2 Explain the level of detail within your records required to justify your decisions on the values recorded and energy efficiency measures included
	5.3 State why it is important to make and maintain complete, accurate and legible records
	5.4 Explain the reasons why it is necessary and important to record where and why accurate inspection has not been possible
	5.5 Explain the circumstances in which records can include the fact that information is "unknown" and the evidence required to support the use of defaults in these circumstances
	5.6 Explain the importance of storing records securely allowing for future access and the purposes for which those records may be used
6. Be able to inspect a Level four non-dwelling	6.1 Ensure that equipment and resources needed are available for the inspection of Level 4 non-dwellings
	6.2 Identify yourself to those present at the property before commencing inspection
	6.3 Identify and record the method of construction of the property and the main materials used, the installed building services and the activities which take place in the building
	6.4 Use surveying equipment correctly and record and interpret data accurately



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	6.5 Identify circumstances when at the property which prevent you continuing with the property inspection and explain the reasons to the client(s)
	6.6 Undertake a methodical visual inspection of the property in accordance with the requirements of the approved software and current Conventions
	6.7 Draw a suitable sketch plan and elevations where none exist
	6.8 Confirm by on-site inspection that the building fabric and installed building services are consistent with the drawings and specifications, where provided
7. Be able to collate information from the on-site inspection and other sources to assess the energy performance of the property	7.1 Make accurate observations and measurements which are necessary to provide data for the calculation of an energy performance rating and production of energy efficiency measures for the property
	7.2 Obtain all additional information that is needed about the property and ensure that defaults are not used except where justified
	7.3 Identify where observations are inconsistent with existing evidence and expected findings and conduct further investigations to establish the causes of these inconsistencies
	7.4 Identify critical property features and activities where incorrect choice of values will be significantly detrimental to accuracy and take appropriate steps to correctly represent these features to arrive at an accurate assessment of the property
	7.5 Follow the correct procedures for collecting information to enable the energy efficiency of the property to be determined
8. Be able to prepare and issue an Energy Performance Certificate which includes recommendations for energy efficiency measures and meets relevant regulations	8.1 Describe the prescribed format and content of an Energy Performance Certificate
	8.2 Explain the way in which energy efficiency measures are generated and circumstances when it is appropriate to delete them
	8.3 Use approved software correctly to determine energy performance ratings and to generate energy efficiency measures for the property
	8.4 Check that data has been inputted correctly prior to lodgement and review data if calculations do not work or if the result appears incorrect
	8.5 Recognise a result that is unlikely to be correct for the property in question
	8.6 Check the Energy Performance Certificate and energy efficiency measures prior to lodgement, ensuring compliance with relevant requirements, and make any necessary amendments
	8.7 Take the necessary corrective action where any of your checks indicate a possible misattribution of data or error in the resulting rating or energy efficiency measures



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	8.8 Use the information technology underpinning the national register for lodgement and retrieval of Energy Performance Certificates
	8.9 Lodge Energy Performance Certificates on the prescribed national databank on completion
	8.10 Provide necessary audit evidence via electronic transfer
9. Be able to make and maintain complete, accurate and legible records of your work	9.1 Produce and maintain accurate and legible records of your findings, which are clear, complete and conform to accepted professional and statutory requirements, including investigations carried out, values recorded and options considered
	9.2 Keep detailed records which ensure that you can produce a complete and comprehensive Energy Performance Certificate and justify your decisions on values recorded and energy efficiency measures selected
	9.3 Collate relevant information as evidence to support the specific decisions made on values chosen and energy efficiency measures considered, including: <ul style="list-style-type: none"> <li>• Legible site notes</li> <li>• Clear site sketches (plan, elevation) to give an adequate record of the inspection for audit purposes</li> <li>• Clear photographs containing mandated data (e.g. time and date) appropriately staged and annotated where necessary</li> <li>• Legibly completed survey forms</li> <li>• Records of web searches or other research</li> <li>• Any other information you consider necessary to support your decisions</li> <li>• Any other information required by Scheme Operating Requirements</li> </ul>
	9.4 Explain the circumstances in which records can include the fact that information is "unknown" and the evidence required to support the use of defaults in these circumstances
	9.5 Store records securely allowing for future access and state the purposes for which your records may be used



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## Unit 10: Undertake energy assessments of existing Level 5 non-dwellings requiring the use of Dynamic Simulation Models DSMs

Unit Reference Number: J/503/8171

Level: 5

Credit: 13

### Unit Summary

This unit will help to develop the knowledge and skills needed to inspect non-dwellings to determine the energy performance of a Level 5 property, using the Dynamic Simulation Model, make recommendations for cost-effective improvements and issue Energy Performance Certificates in compliance with regulatory requirements.

### Assessment Guidance

This unit can be assessed using the following method(s):

- Portfolio of evidence

<b>Learning Outcome The learner will:</b>	<b>Assessment Criterion The learner can:</b>
1. Understand the equipment and resources needed to undertake energy inspections	1.1 Explain the principles of building structure elements, fabric, services and overall design philosophy as relevant to energy assessment
	1.2 Identify equipment and resources needed to undertake the inspection
	1.3 Explain the detailed inspection requirements that apply to a property as described in relevant guidance documents and convention
	1.4 Explain the definitions and conventions embodied within the approved software used to calculate energy performance ratings
	1.5 Identify, from drawings and building structures, the various types of building construction, materials and services
	1.6 Explain how to conduct the inspection in a thorough, methodical and consistent manner
	1.7 Identify the range of measures to improve the energy performance of a property that may be included within an Energy Performance Certificate Recommendations Report
2. Understand the implications of building characteristics affecting the energy performance of a property	2.1 Identify assumptions that are made in determining energy performance
	2.2 State the factors that are relevant to determining the energy performance of a property and those that are deemed not to affect the energy performance of the property
	2.3 Identify and evaluate the relevance of building characteristics which affect the energy performance of a Level 5 building and make it distinct from Level 4



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	2.4 Identify and classify variations in building use and activities, as defined in Dynamic Simulation Models (DSMs) and conventions, including the use of planning classifications
	2.5 Describe the relative sensitivity of the different building characteristics that affect the energy performance of the building structure and fabric
	2.6 Identify critical property features and activities where incorrect choice of values will be significantly detrimental to accuracy, including: <ul style="list-style-type: none"> <li>• Allocation of the most appropriate activity to zones</li> <li>• Lighting</li> <li>• Choice of default HVAC in zones where none exists</li> <li>• Selection of HVAC efficiency and its allocation to the appropriate zone</li> <li>• Availability of daylight and presence of Low and Zero Carbon Technologies</li> </ul>
	2.7 Identify the problems that can affect the energy performance of the building fabric and services
	2.8 Review the implications of hazardous building fabric for the energy assessment and reporting
3. Understand how to collate information from the on-site inspection and other sources to assess the energy performance of the property	3.1 How to make accurate observations and take accurate measurements
	3.2 How to make further investigations where observations are inconsistent with existing evidence and expected findings, and how to identify the causes of these inconsistencies
	3.3 How to collate information required to assess the energy performance of property
4. Understand how to prepare and issue an Energy Performance Certificate which includes recommendations for cost-effective improvements and meets relevant regulations	4.1 State the prescribed format and content of an Energy Performance Certificate
	4.2 State the range of energy efficiency measures that may be included within an Energy Performance Certificate
	4.3 Identify the approved software used for the production and lodgement of completed Energy Performance Certificates
	4.4 Explain how to correctly use the approved software for the production and lodgement of completed Energy Performance Certificates
	4.5 Explain the principles underpinning the approved tools used to calculate the energy performance ratings
	4.6 Explain how to input data using the approved software in order to determine energy performance ratings
	4.7 Explain how to use approved software to generate energy efficiency measures for the property
	4.8 Explain the importance of checking that data has been inputted correctly prior to lodgement and how to review data if the calculation will not process or appears incorrect



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	4.9 Explain the importance of checking the energy efficiency measures generated prior to lodgement, deleting any that are inappropriate and providing your reasons
	4.10 Explain the way in which energy efficiency measures are generated and circumstances when it is appropriate to delete them
	4.11 Explain the importance of checking the Energy Performance Certificate and energy efficiency measures for the property to ensure they comply with relevant requirements
	4.12 Explain how to use the information technology underpinning the national register for lodgement and retrieval of Energy Performance Certificates and how to provide necessary audit evidence via electronic transfer
5. Understand how to make and maintain complete, accurate and legible records of your work	5.1 Explain the level of detail within your records required to produce a complete and comprehensive Energy Performance Certificate and justify your decisions on the values recorded and energy efficiency measures
	5.2 Explain the importance of making and maintaining records that are complete, accurate and legible
	5.3 Explain the reasons why it is necessary and important to record where and why accurate inspection has not been possible
	5.4 Explain the circumstances in which records can include the fact that information is "unknown" and the evidence required to support the use of defaults in these circumstances
	5.5 Explain the importance of storing records securely allowing for future access and the purposes for which those records may be used
6. Be able to inspect a Level 5 non-dwelling	6.1 Ensure that equipment and resources needed are available for the inspection of Level 5 non-dwellings
	6.2 Identify yourself to those present at the property before commencing inspection
	6.3 Identify and record the method of construction of the property and the main materials used, the installed building services and the activities which take place in the building
	6.4 Use surveying equipment correctly and record and interpret data accurately
	6.5 Identify circumstances when at the property which prevent you continuing with the property inspection and explain the reasons to the customer(s)
	6.6 Undertake a methodical visual inspection of the property in accordance with the requirements of the approved software and current Conventions
	6.7 Draw a suitable sketch plan and elevations where none exist
	6.8 Confirm by on-site inspection that the building fabric and installed building services are consistent with the drawings and specifications, where provided
7. Be able to collate information from the on-site inspection and other sources to	7.1 Make accurate observations and measurements which are necessary to provide data for the calculation of an energy performance rating and production of energy efficiency measures for the property



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assess the energy performance of the property	7.2 Obtain all additional information that is needed about the property and ensure that defaults are not used except where justified
	7.3 Identify where observations are inconsistent with existing evidence and expected findings and conduct further investigations to establish the causes of these inconsistencies
	7.4 Identify critical property features and activities where incorrect choice of values will be significantly detrimental to accuracy and take appropriate steps to correctly represent these features to arrive at an accurate assessment of the property
	7.5 Follow the correct procedures for collecting information to enable the energy efficiency of the property to be determined
8. Be able to prepare and issue an Energy Performance Certificate which includes recommendations for energy efficiency measures and meets relevant regulations	8.1 Describe the prescribed format and content of an Energy Performance Certificate
	8.2 Explain the way in which energy efficiency measures are generated and circumstances when it is appropriate to delete them
	8.3 Use approved software correctly to determine energy performance ratings and to generate energy efficiency measures for the property
	8.4 Check that data has been inputted correctly prior to lodgement and review data if calculations do not work or if the result appears incorrect
	8.5 Recognise a result that is unlikely to be correct for the property in question
	8.6 Check the Energy Performance Certificate and energy efficiency measures prior to lodgement, ensuring compliance with relevant requirements and make any necessary amendments
	8.7 Take the necessary corrective action where any of your checks indicate a possible misattribution of data or error in the resulting rating or energy efficiency measures
	8.8 Use the information technology underpinning the national register for lodgement and retrieval of Energy Performance Certificates
	8.9 Lodge Energy Performance Certificates on the prescribed national databank on completion
	8.10 Provide necessary audit evidence via electronic transfer
9. Be able to make and maintain complete, accurate and legible records of your work	9.1 Produce and maintain accurate and legible records of your findings, which are clear, complete and conform to accepted professional and statutory requirements, including investigations carried out, values recorded and options considered
	9.2 Include in your records the level of detail required to produce a complete and comprehensive Energy Performance Certificate and justify your decisions on values recorded and energy efficiency measures selected



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	<p>9.3 Collate relevant information as evidence to support the specific decisions made on values chosen and energy efficiency measures considered, including:</p> <ul style="list-style-type: none"> <li>• Legible site notes, clear site sketches (plan, elevation) to give an adequate record of the inspection for audit purposes</li> <li>• Clear photographs containing mandated data (e.g. time and date) appropriately staged and annotated where necessary</li> <li>• Legibly completed survey forms</li> <li>• Records of web searches or other research</li> <li>• Any other information you consider necessary to support your decisions</li> <li>• Any other information required by Scheme Operating Requirements</li> </ul>
	<p>9.4 Explain the circumstances in which records can include the fact that information is “unknown” and the evidence required to support the use of defaults in these circumstances</p>
	<p>9.5 Store records securely allowing for future access and state the purposes for which your records may be used</p>



## Unit 11: Report on the energy assessment of new and existing non-dwellings using Dynamic Simulation Model DSM

Unit Reference Number: R/503/8173

Level: 5

Credit: 9

### Unit Summary

This unit will help to develop the knowledge and skills needed to prepare a report on the energy assessment of new and existing non dwellings using Dynamic Simulation Model (DSM)

### Assessment Guidance

This unit can be assessed using the following method(s):

- Portfolio of evidence

<b>Learning Outcome The learner will:</b>	<b>Assessment Criterion The learner can:</b>
1. Understand how to produce Recommendations Reports for non-dwellings using DSM	1.1 Describe the prescribed format and content of a Recommendations Report
	1.2 Identify the range of energy efficiency measures that may be included within a Recommendations Report
	1.3 State the approved software used to generate energy efficiency measures for the property
	1.4 Explain the principles underpinning the approved software used to calculate energy ratings and produce Recommendations Reports
	1.5 Explain how to correctly use the approved software used to produce Energy Performance Certificates
	1.6 Explain the importance of checking that data has been inputted correctly and how to review data if the calculation will not process or if the result appears incorrect
	1.7 Explain how to check the Energy Performance Certificate Recommendations Report for cost-effective improvement, ensuring compliance with relevant requirements and conventions
	1.8 Identify the level of detail within your records required to produce a complete and comprehensive Recommendations Report and justify your decisions on the values recorded and energy efficiency measures selected
	1.9 Explain the importance of making and maintaining records that are complete, accurate and legible
	1.10 Explain the reasons why it is necessary and important to record where and why accurate inspection has not been possible



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	1.11 Identify the circumstances in which records can include the fact that information is “unknown” and the evidence required to support this choice
	1.12 Explain the importance of storing records securely allowing for future access and the purposes for which your records may be used
2. Understand how to provide a clearly defined and robust hierarchy of energy efficiency measures for non-dwellings	2.1 Explain how to use approved software to generate energy efficiency measures for the property
	2.2 Explain the way in which energy efficiency measures are generated and circumstances when it is appropriate to delete them
	2.3 Explain the importance of checking the energy efficiency measures generated, deleting any that are inappropriate and providing your reasons
	2.4 Identify the factors that could affect the choice of energy efficiency measures in relation to: <ul style="list-style-type: none"> <li>• Issues that make them unsuitable for the property</li> <li>• Interactions between building fabric and building services</li> <li>• Listed buildings/conservation areas</li> </ul>
	2.5 Identify the issues that could make energy efficiency measures unsuitable for the property, including: <ul style="list-style-type: none"> <li>• Property situation e.g. subject to extreme weather</li> <li>• Property condition e.g. state of repair of external walls</li> <li>• Inadequate ventilation</li> <li>• Traditional construction</li> <li>• Any other features of the property, or its site/location, which might adversely affect the performance of the recommended improvement, or the building’s performance after improvement</li> </ul>
	2.6 Explain how to make appropriate deletions/amendments based on the practical and economic feasibility for the building under consideration
	2.7 Identify current typical costs of energy efficiency measures
	2.8 Explain how to estimate typical costs, for the particular building, of any proposed energy efficiency measures
	2.9 Explain how to assess the carbon impact and payback period of energy efficiency measures in order to provide an hierarchy of improvement measures
	2.10 Identify the data and information required to be lodged on the relevant central register
	2.11 Identify appropriate advice on the implementation of the energy efficiency measures that may be given to the client
3. Understand how to communicate the value of a Recommendations Report and how it can be used	3.1 State the objective of producing Recommendations Reports
	3.2 Explain the difference between high, medium and low carbon impact energy efficiency measures and the scale of savings that each may achieve



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	3.3 Identify which recommendations have greater impact on the energy performance of the building in question and why
	3.4 Explain how estimates of costs for energy efficiency measures have been arrived at and how robust they are
	3.5 Explain how to communicate and explain the energy efficiency measures to the client
	3.6 Explain the importance of retaining documentation for audit purposes or legal compliance
	3.7 Explain how to convey essential information in a written report in a way which will be comprehensible to the client
	3.8 Identify where to refer clients for further help and advice
4. Be able to produce Recommendations Reports for non-dwellings using DSM	4.1 Describe the prescribed format and content of Recommendations Report
	4.2 Identify the range of energy efficiency measures that may be included within Recommendations Report
	4.3 Use approved software to generate energy efficiency measures that improve energy performance
	4.4 Check the Recommendations Report, ensuring compliance with relevant requirements and current conventions
	4.5 Produce and maintain accurate and legible records which are clear, complete and conform to accepted professional and statutory requirements including: <ul style="list-style-type: none"> <li>• Records investigations carried out</li> <li>• Values recorded</li> <li>• Options considered</li> </ul>
	4.6 Keep detailed records which ensure you can produce a complete and comprehensive Energy Performance Certificate and justify your decisions on values recorded and energy efficiency measures selected
	4.7 Describe the circumstances in which records can include the fact that information is “unknown” and the evidence required to support this choice
	4.8 Store records securely allowing for future access and explain the purposes for which the records may be used
5. Be able to provide a clearly defined and robust hierarchy of recommendations for reducing the energy use of non-dwellings	5.1 Use the approved software to generate energy efficiency measures to improve energy performance
	5.2 Check the energy efficiency measures generated and make appropriate deletions, additions and amendments based on the practical and economic feasibility for the building under consideration
	5.3 Provide documented reasons for the proposed energy efficiency measures selected



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	<p>5.4 Take account of factors that could affect the choice of energy efficiency measures for improvements to the property, including:</p> <ul style="list-style-type: none"> <li>• Issues that make them unsuitable for the property</li> <li>• Interactions between building fabric and building services</li> <li>• Listed building status/conservation areas</li> </ul>
	5.5 Describe the technical specifications, features and benefits of energy efficiency measures that may improve the energy performance of Level 5 buildings
	5.6 Identify the relative costs of any energy efficiency measures which may be proposed
	5.7 Provide a hierarchy of improvement measures based on carbon impact and payback period
	5.8 Identify the data and information required to be lodged on the relevant central register and show understanding of the lodging procedures
	5.9 Produce a valid Recommendations Report, in accordance with approved guidance
	5.10 Provide initial advice on the implementation of the recommendations made
6. Be able to communicate the value of a Recommendations Report and how it can be used	6.1 Explain to clients the objective of producing Recommendations Reports
	6.2 Explain to clients the difference between high, medium and low carbon impact measures, giving examples of the scale of savings which may be achieved by each
	6.3 Explain to clients which elements have greater impact on the energy performance of the building in question and why
	6.4 Explain to clients how estimates of costs for energy efficiency measures have been arrived at and how robust they are
	6.5 Explain to clients the energy efficiency measures to the client
	6.6 Understand the importance of retaining documentation for audit purposes or legal compliance
	6.7 Highlight the essential information contained in the Recommendations Report to the client, in writing, in a way which will be comprehensible to the client



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## Unit 12: Carry out Building Regulations Compliance checks of as-designed and as-built new-build non-dwellings using the Simplified Building Energy Model (SBEM)

Unit Reference Number: J/504/5895

Level: 4

Credit: 11

### Unit Summary

This unit will develop the knowledge and skills needed to carry out compliance checks of, and issue EPCs for, all new-build non-dwellings using SBEM, make recommendations for cost-effective improvements and issue Energy Performance Certificates in accordance with regulatory requirements.

### Assessment Guidance

This unit can be assessed using the following method(s):

- Portfolio of evidence

<b>Learning Outcome The learner will:</b>	<b>Assessment Criterion The learner can:</b>
1. Understand the requirement for new Buildings other than Dwellings to be compliant with the energy efficiency requirements of EU and national legislation	1.1 Identify the European legislation that lays down the requirement for energy efficiency in new-build non dwellings
	1.2 Describe how the EU legislation for new build non-dwellings is implemented in national legislation
	1.3 Explain the purpose of Building Regulations in relation to the energy efficiency of new-build non-dwellings
	1.4 Describe which buildings are subject to Building Regulations compliance checks, including those subject to special considerations
	1.5 Explain why some types of new Buildings other than Dwellings are exempt from Building Regulations
	1.6 Describe the purpose of the National Calculation Methodology (NCM) as it relates to checking compliance of new Buildings other than Dwellings
	1.7 Explain how the NCM is implemented using SBEM
	1.8 Describe the procedure for reporting evidence of compliance to the Building Control Body
2. Understand the role of the energy assessor in checking compliance of new Buildings other than Dwellings with the energy efficiency requirements of the Building regulations	2.1 List the key stages in the procurement, design, construction commissioning and handover of a new building
	2.2 Describe the role of the energy assessor in the design, construction and handover of a new building



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	2.3 Explain how the energy assessor delivers information that can affect the energy performance of a building design
	2.4 Explain the role of the Building Control Body in the compliance checking process
	2.5 Describe the consequences of a non-compliant new build non-dwelling
	2.6 Describe how the energy assessor can communicate options to improve the energy performance of a non-compliant building to one that is compliant with Building Regulations
3. Understand the factors that affect the compliance of new Buildings other than Dwellings with the energy efficiency requirements of the Building Regulations	3.1 Describe the key factors and properties of a building's location, construction, envelope and building services that affect its energy performance
	3.2 Describe how information presented in drawings and specifications is used to calculate U and Kappa (Cm) values
	3.3 Describe how information obtained from drawings, specifications, calculations and tests is used to create a model in SBEM of new-design and as-built buildings
	3.4 Explain the origins and purpose of: the TER; the BER; the SER; the notional building; the reference building
	3.5 Explain the role of Approved documents in checking compliance of new Buildings other than Dwellings with Building regulations
	3.6 Explain the role of 2nd Tier documentation in checking compliance of new Buildings other than Dwellings with Building regulations
	3.7 List the Building Regulations Part L criteria for new buildings other than dwellings
	3.8 Explain how the Building Regulations Part L criteria are used to demonstrate that new buildings other than dwellings are compliant with Building Regulations
	3.9 Explain the role of Low and Zero Carbon and Renewables technologies in the delivery of a compliant building
	3.10 Explain the purpose of a building envelope pressure test
	3.11 Describe how a building envelope pressure test is conducted
4. Be able to carry out a compliance check of new Buildings other than Dwellings with the energy efficiency	4.1 Assemble and collate, from drawings, specifications, tests and accredited detail, the various types of building construction, materials, parameters and services required to create a model of the new-build non-dwelling in SBEM



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requirements of the Building Regulations	4.2 Determine whether the building design is suitable for modelling in SBEM or requires Dynamic Simulation Modelling (DSM)
	4.3 Use the information gathered to calculate where necessary the parameters to create a model of the new-build non-dwelling in SBEM
	4.4 Create a model of the new-build non-dwelling in SBEM to carry out a Building Regulations compliance check
	4.5 Utilise the SBEM model to compare the outputs of the model with those required for compliance with Building Regulations
	4.6 Identify, with the aid of the SBEM outputs, the Approved Document and 2nd tier documentation, a range of options for the parameters that could be changed in order to produce a new building that is compliant with Building Regulations
	4.7 Communicate options to the client on the changes that could deliver a new building that is compliant with Building Regulations
	4.8 Explain any assumptions that have been used in the original or updated SBEM models
	4.9 Prepare an EPC of the 'as built' non-dwelling, in accordance with current conventions, together with the outputs needed to demonstrate compliance with the energy efficiency requirements of the Building Regulations



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