Group Award Specification for:

HNC Sustainable Resource Management

Group Award Code: GJ0T 15

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Contents

1   Introduction

This document was previously known as the Arrangements document. The purpose of this document is to:

♦   assist centres to implement, deliver and manage the qualification
♦   provide a guide for new staff involved in offering the qualification
♦   inform Course managers, teaching staff, assessors, learners, employers and HEIs of the aims and purpose of the qualification
♦   provide details of the range of learners the qualification is suitable for and progression opportunities

Rationale

This qualification is designed to replace the existing HNC Waste Management. The HNC Waste Management was validated in August 2006. Many of Units within that qualification refer to old technologies, policies and initiatives. 50% of the Units refer to generic management practices which are considered too high.

Research undertaken and supported by the energy and utility skills (EU skills) organisation indicate that the waste and recycling industry is undergoing dynamic and sustained change. This is impacting upon the utilisation of new technologies and automation of processes. Stakeholders accept that there is an urgent need for up-skilling the workforce and to encourage new entrants to the industry.

Subject specialists, academics, employer groups and trade bodies have been consulted with their input influencing the design of the HNC Sustainable Resource Management. The knowledge and skills in the new qualification are contemporary and will be expressed in such a way that anticipated (and relevant) changes can be covered without recourse to major re-development in the near future.

The aim of the proposed Group Award reflects the broad nature of the organizations situated within the waste management sustainable resource management sector. They also confirm the requirement to develop competent professionals to respond positively to the rapidly changing environment of the waste management, sustainable resource management sector'.

The proposed title reflects the needs of stakeholders operating within the waste management sustainable resource management sector. This can be supported by referring to the revised purpose of a leading stakeholder in the Industry, the Chartered Institution of Wastes Management (CIWM) which states:

"Setting Professional Standards in Sustainable Resource and Waste Management"

Key stakeholders, including the CIWM and Zero Waste Scotland (ZWS) are keen to enhance employability prospects within the waste management sustainable resource management sector. These stakeholders wish to see more applicants joining the waste management sustainable resource management sector in operational, technical or management roles and also offer the opportunity for those employed to gain promotion.

The qualification complements existing qualifications, such as SVQs in Waste and the new Diploma suite in Wastes Management Operations as it provides a range of Units aimed at developing the knowledge and skills of those employed in the Industry. The mandatory Units (except the Graded Unit) are double credit Units thus providing the opportunity for learners to develop competences to a greater range and depth of knowledge and skills. When achieved it has been designed to meet the minimum entry requirements for higher level qualifications

Market research, for example by reference to the new rationale for the CIWM indicates that the proposed title will be attractive to school leavers or adults wishing to enter employment within the waste management sustainable resource management sector.

The qualification has been designed at SCQF level 7 as this level maybe considered an appropriate level for those leaving school at S5 or S6 with Highers. For those in employment within sustainable resource management sector this level shall allow learners to develop, apply knowledge, skills and understanding in practical contexts. This qualification shall allow all learners to use some of the basic and routine professional skills, techniques, practices and/or materials associated with the sustainable resource management sector.

The qualification complements existing qualifications, such as SVQs in Waste and when achieved it has been designed to meet the minimum entry requirements for higher level qualifications such as Diplomas or Degree.

	Entry With qualification	Direct entry 1 Higher OR Relevant experience				
SCQF level	5/6	7	8	9	10	11
Qualification	SVQ in Waste Management OR Modern Apprenticeship in Sustainable Resource Management level 2 and 3	HNC Sustainable Resources Management	HND or Diploma in Management and Leadership	Higher Education PG Diploma BSc Hrs Degree		MSc Waste Management or Diploma in Strategic Management and Leadership

2 Qualification(s) structure

This Group Award is made up of 12 SQA Unit credits. It comprises 96 SCQF credit points of which 72 are at SCQF level 7 in the mandatory section including a Graded Unit of 8 SCQF credit points at SCQF level 7. A mapping of Core Skills development opportunities is available in Section 5.3.

2.1 Structure

4 code	2 code	Unit Title	SQA credit	SCQF credit points	SCQF level
Mandatory Units					
H65H	34	Sustainable Resource Management: Waste Policy and Legislation	2	16	7
H65J	34	Fundamentals of Sustainable Resource Management: Science and Technologies	2	16	7
H65K	34	Sustainable Resource Management: Materials and Resources	2	16	7
H65L	34	Sustainable Resource Management: Permitting and Operational Practice	2	16	7
H67T	34	Sustainable Resources Management: Graded Unit 1	1	8	7
Optional Units Minimum of 3 Credits required, from:					
H65M	34	Sustainable Resource Management: An Introduction	2	16	7
F1NH	34	Project Management: An Introduction	1	8	7
F03K	33	Job Costing and Business Calculations	1	8	6
DN38	34	Sustainable Development	1	8	7
DE3R	34	Personal Development Planning	1	8	7
H1KP	34	Human Resource Management: Introduction	1	8	7
DV0N	35	Plan an Environmental Management System	2	16	8

The award has been designed in accordance with SQA's design principles for HN awards. The HNC Sustainable Resource Management comprises 96 SCQF credit points at SCQF level 7. The HNC should include a mandatory section of at least 72 SCQF credit points and include one Graded Unit of 8 SCQF credit points at SCQF level 7.

There is no sequentially within the Units comprising the HNC Sustainable Resources Management. It is recommended that learners have studied/are studying the four 2 credit mandatory Units prior to undertaking the Graded Unit.

Learners wishing to develop *Numeracy skills* may be directed to complete *Job Costing and Business Calculations* at SCQF level 6 early in their programme. Learners considering further study may consider selecting *Plan an Environmental Management System* at SCQF level 8 which will provide them with an understanding of the requirements of studying at that level.

3 Aims of the qualification

To offer education, learning and development opportunities for those employed or aspiring to employment in the Waste Management, Recycling and Resource Recovery Industry.

3.1 General aims of the qualification(s)

1   Develop suitable competences to enhance their career within the above.
2   Progress further professional, academic or vocational qualifications, to include progression within SCQF.
3   Provide a basis for future career and personal development.
4   Build on previously acquired transferable skills.

3.2 Specific aims of the qualification(s)

1   Equip candidates with the knowledge and understanding to material and resource use within the Economy and the waste sustainable resource management sectors.
2   To develop the knowledge and understanding of how the waste sustainable resource management sector respond to the challenges posed by material and resource usage.
3   Support the development of innovative and creative approaches to work and enable quick responses to the challenges posed by changes in the waste sustainable resource management sector
4   Develop an understanding of the requirements which underpin the management of materials and resources utilisation as they impact upon the waste sustainable resource management sector.
5   Develop the knowledge and understanding of relevant national and local waste, recycling and resource recovery strategies.

3.3 Graded Unit(s)

Graded Unit 1

The Graded Unit is designed to provide evidence that the learner has achieved the principal aim of the HNC Sustainable Resource Management:

♦   To offer education, learning and development opportunities for those employed, or aspiring to employment, in the waste sustainable resource management sector.

This Graded Unit is designed to provide evidence that the learner can demonstrate an understanding of the role of waste/resource management within society. Learners will have an opportunity to demonstrate knowledge and skills in a key area of their study and to explore the impact of developments affecting the industry.

An investigative project will allow learners to demonstrate: research, analysis and evaluative skills acquired during the course. It will allow learners to use written reporting skills, evidenced by the three stages required by the Graded Unit.

4 Recommended entry to the qualification(s)

Entry to this qualification is at the discretion of the centre. The following information on prior knowledge, skills, experience or qualifications that provide suitable preparation for this qualification has been provided by the Qualification Design Team as guidance only.

Learners may benefit from an interview during which general advice about Sustainable Resource and the specific nature of HNC Sustainable Resource Management should be discussed.

Within the interview it should be possible to gain clarification from mature learners about the nature of their experiences which may allow the centre to consider recognising that experience for a possible claim for Accreditation of Prior Experiential Learning (APEL).

Learners would benefit from having attained the skills, knowledge and understanding required by one or more of the following or equivalent qualifications and/or experience:

♦ Any two relevant National Courses at SCQF level 5
♦ Certificate — Principles of Sustainable Resource Management at SCQF level 5
♦ SVQs at level 5:

  — Frontline Environmental Services
  — Waste Operations: Waste Collection Driver
  — Waste Operations: Waste Collection Operative
  — Waste Operations: Waste Site Operative
  — Waste Operations: Waste Team Leader
  — Waste Operations: Waste Weighbridge Operative

♦ Chartered institution of Waste Management Waste Awareness Certificate
♦ Certificate — Principles of Sustainable Resource Management at SCQF level 6
♦ SVQ at level 6 in Waste Supervisory Management

♦ Diplomas at SCQF level 7:

  — Waste Management Operations: Managing Physical and Chemical Treatment - Hazardous Waste
  — Waste Management Operations: Managing Physical and Chemical Treatment Non Hazardous Waste
  — Waste Management Operations: Managing Transfer Hazardous Waste
  — Waste Management Operations: Managing Transfer Non-Hazardous Waste.

♦ Mature learners with suitable relevant work experience may be accepted without formal qualifications Centres may wish to use Core Skill profiling to assist them in this process.
♦ For learners for whom English is an additional language, it is recommended that they possess SQA *English for Speakers of other Languages* (ESOL) at an appropriate level.

4.1 Core Skills entry profile

The Core Skill entry profile provides a summary of the associated assessment activities that exemplify why a particular level has been recommended for this qualification. The information should be used to identify if additional learning support needs to be put in place for learners whose Core Skills profile is below the recommended entry level or whether learners should be encouraged to do an alternative level or learning programme.

The recommended Core Skills entry levels for HNC Sustainable Resource Management are:

Core Skill	Recommended SCQF entry profile	Associated assessment activities
Communication	5	Written communication will be developed through learners producing written work in their assessment; oral communication will be developed through discussion, debate and evidence of engagement with other internal stakeholders in the preparation of their assessment submissions.
Numeracy	4	Learners may develop *Numeracy* skills through the assessment of a number of Units. Candidates may gain credit at level 5 by completing the Unit *Job Costing and Business Calculations* F03K 33.
Information and Communication Technology (ICT)	4	Learners will use *Information and Communication Technology* (ICT) to carry out research, analyse data and undertake assessments. Charts may be presented within the evidence for a number of Units.
Problem Solving	5	Many assessments will involve learners developing all components of *Problem Solving*. Learners will have to think how to carry out the task, plan and organise research and review and evaluate their findings.
Working with Others	4	Learners will be encouraged to work in teams to carry out some project work which may take the form of on-line forums and this will be a natural consequence of collaborative work.

5 Additional benefits of the qualification in meeting employer needs

This qualification has been designed following representation from CIWM and employer representatives and ZWS. These stakeholders consider the qualification will benefit them by:

♦ Providing a more competent workforce
♦ Allowing employees to improve self confidence
♦ Allowing employees to become more effective

5.1 Mapping of qualification aims to Units

Unit title	Unit code	G1	G2	G3	G4	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10	S11	S12	S13	S14	S15
		General Aims				Specific Aims														
SRM: Materials and Resources	H65K 34			√										√	√	√				
SRM: Waste Policy and Legislation	H65H 34	√				√	√	√	√											
Fundamentals of Sustainable Resource Management Science and Technologies	H65J 34				√												√	√	√	√
SRM: Permitting and Operational Practice	H65L 34		√							√	√	√	√							
SRM: Graded Unit 1	H67T 34	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√				√
Project Management: An Introduction	F1NH 34			√			√					√								
SRM: An Introduction	H65M 34	√		√	√	√	√		√		√	√	√	√	√	√	√	√	√	√
Personal Development Planning	DE3R 34	√		√		√			√	√	√			√	√					
Job Costing and Business Calculations	FO3K 33	√	√	√		√	√		√	√		√	√	√	√	√				
Sustainable Development	DN38 34	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√				√
Human Resource Management: Introduction	H1KP 34	√	√	√			√		√		√	√	√	√	√					
Plan an Environmental Management System	DV0N 35	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√

5.2 Mapping of National Occupational Standards (NOS) and/or trade body standards

Units provide under-pinning knowledge for the standards identified

Unit title	Unit code	EUSW S04	EUSW O01	EUSW O16	EUSW O23	EUSW O29	EUSW O33	EUSW M09	EUSW M16	EUSW M19	EUSW M22	EUSW M23	EUSW M24	EUSW M35	EUSW M50
SRM: Materials and Resources	H65K 34			√	√		√				√				
SRM: Waste Policy and Legislation	H65H 34		√		√		√					√	√		
Fundamentals of Sustainable Resource Management Science and Technologies	H65J 34			√	√		√			√	√				
SRM: Permitting and Operational Practice	H65L 34			√	√				√			√	√		
SRM: Graded Unit 1	H67T 34			√				√						√	√
Project Management: An introduction	F1NH 34			√									√		
SRM: An Introduction	H65M 34		√			√	√								
Personal Development Planning	DE3R 34														√

Unit title	Unit code	EUSW S04	EUSW O01	EUSW O16	EUSW O23	EUSW O29	EUSW O33	EUSW M09	EUSW M16	EUSW M19	EUSW M22	EUSW M23	EUSW M24	EUSW M35	EUSW M50
Job Costing and Business Calculations	FO3K 33														
Sustainable Development	DN38 34			√		√	√								
Human Resource Management: Introduction	H1KP 34	√	√												
Plan an Environmental Management System	DV0N 35	√	√		√		√	√				√	√	√	√

The HNC in Sustainable Resource Management is aligned to the National Occupational Standards for the waste sustainable resource management sector in that it addresses the technical knowledge and skills as described.

EUskills is the Sector Skills Council responsible for the skills agenda of the UK waste management industry. This means that it covers the activities of collection, treatment and final management of waste and recyclables. There are over 120 standards currently approved.

Over 120 National Occupational Standards for wastes management have been developed. These offer guidance regarding the competencies required by those employed within the waste sustainable resource management sectors to ease entry into the industry and facilitate career progression through it. SQA have developed 6 SCQF level 5 and 1 SCQF level 6 SVQs and 4 SCQF level 7 Diplomas.

5.3 Mapping of Core Skills development opportunities across the qualification(s)

Unit code	Unit title	Communication		Numeracy		I CT		Problem Solving			Working with Others	
		Written	Oral	Using Number	Using Graphical Information	Accessing Information	Providing/ Creating information	Critical Thinking	Planning and Organising	Reviewing and Evaluating	Working Co-operatively with Others	Reviewing Co-operative Contribution
H65K 34	SRM: Materials and Resources	Signposted to level 6		Signposted to level 5		Signposted to level 5		Signposted to level 6			No opportunity	
H65H 34	SRM: Waste Policy and Legislation	Signposted to level 6		Signposted to level 5		Signposted to level 5		Signposted to level 6			No opportunity	
H65J 34	Fundamentals of Sustainable Resource Management Science and Technologies	Signposted to level 6		Signposted to level 5		Signposted to level 5		Signposted to level 6				
H65L 34	SRM: Permitting and Operational Practice	Signposted to level 6		Signposted to level 5		Signposted to level 5		Signposted to level 6			No opportunity	
H67T 34	SRM: Graded Unit 1	Signposted to level 6		Signposted to level 6		Signposted to level 6		Embedded at level 6			Signposted to level 6	
F1NH 34	Project Management: An Introduction	Signposted to level 6		Signposted to level 6	No opportunity	Signposted to level 6		Signposted to level 6			Signposted to level 6	
H65M 34	SRM: An Introduction	Signposted to level 6		Signposted to level 5		Signposted to level 5		Signposted to level 6			No opportunity	
DE3R 34	Personal Development Planning	There will be many opportunities to gather evidence towards Core Skills in this Unit, although there is no automatic certification of Core Skills or Core Skills components.										
FO3K 33	Job Costing and Business Calculations	Signposted to level 6		Embedded at level 5		No opportunity		No opportunity			No opportunity	
DN38 34	Sustainable Development	There may be opportunities to gather evidence towards Core Skills in this Unit although there is not automatic certification of Core Skills or Core Skills components. The gathering together of data and the production of the assessment documents will involve Communication skills (developed), IT (developed) and Working With Others (developed)										

Unit code	Unit title	Communication		Numeracy		I CT		Problem Solving			Working with Others	
		Written	Oral	Using Number	Using Graphical Information	Accessing Information	Providing/ Creating information	Critical Thinking	Planning and Organising	Reviewing and Evaluating	Working Co-operatively with Others	Reviewing Co-operative Contribution
H1KP 34	Human Resource Management: Introduction	Signposted to level 6		Signposted to level 6		Signposted to level 6		Signposted to level 6			Signposted to level 6	
DV0N 35	Plan an Environmental Management System	Signposted to level 6		Signposted to level 6		Signposted to level 6		Signposted to level 6			Signposted to level 6	

Embedded/automatic certification
Signposted, there is an opportunity to develop Core Skills in this Unit
level 5/6 indicates SCQF level

5.4 Assessment Strategy for the qualification(s)

Unit Code	Unit title	Assessment				
		Outcome 1	Outcome 2	Outcome 3	Outcome 4	Outcome 5
H65K 34	SRM: Materials and Resources	It is suggested a holistic approach is taken to the assessment of this Unit. Integration of the Outcomes of this Unit is encouraged. The use of directed studies, eg essays, structured questions and other investigative activities such as portfolios or blogs (written and/or orally recorded) is suggested, coupled with short test, eg multiple choice assessments. Where an integrated assessment is used, an overall word count of approximately 2000–2,500 words would be envisaged. It is suggested that a flexible holistic approach is key to the successful assessment of this Unit. Assessment by open-book would be appropriate for this Unit.				
H65H 34	SRM: Waste Policy and Legislation	The assessment of this Outcome can be combined with Outcome 1 as part of a single assessment for the Unit. In the assessment, learners could produce a report in response to set questions based on a case study.		The assessment of this Outcome could be conducted at a single assessment event whereby learners could produce a report based on a set question and/or a case study.	The assessment of this Outcome may be by use of an open-book test where the learner classifies a number of different wastes correctly using information provided to them.	
H65J 34	Fundamentals of Sustainable Resource Management: Science and Technologies	It is suggested a holistic approach is taken to the assessment of this Unit. Integration of the Outcomes of this Unit is encouraged. The use of directed studies, eg essays, structured questions and other investigative activities (written and/or orally recorded) is suggested, coupled with short test, eg multiple choice assessments. Equally it is possible to additionally use a closed-book exam as part of the assessment package for this Unit. Where an integrated assessment is used, an overall word count of approximately 2000–2,500 words would be envisaged. It is suggested that a flexible holistic approach is key to the successful assessment of this Unit. As with any Unit, centres should ensure they can authenticate learners' assessments. This may be done by questioning learners about their work, by viewing drafts of partially completed assessments or by using an online anti-plagiarism tool.				
H65L 34	SRM: Permitting and Operational Practice	The Unit could be assessed by a single instrument of assessment that requires learners to produce a report and answer questions based on a case study or on their workplace experience (depending on the current situation of the learners and their prior experience). It would also be possible to break this assessment down into four separate assessment events that assess each Outcome separately. Assessment by open-book would be appropriate for this Unit with a suggested time limit of 2 hours. It would also be appropriate for all learners to be given a copy of a "model" permit/license containing standard conditions.				
H67T 34	SRM: Graded Unit 1	Project — practical assignment. The project should be based on an in-depth investigation of the organisation's environmental performance. It should clearly identify strengths, weaknesses, opportunities and threats and make clear recommendations for improvement where appropriate. The three stages will be conducted Open-book.				
F1NH 34	Project Management: An Introduction	Candidates will be required to develop a project management technique. Conducted open-book.	Candidates have to close and complete a project. Conducted open-book.	Candidates will be assessed on the evaluation of their project. Conducted open-book.		

Unit Code	Unit title	Assessment				
		Outcome 1	Outcome 2	Outcome 3	Outcome 4	Outcome 5
F1NH 34	SRM: An Introduction	This Unit introduces learners to a range of complex issues and concepts, ensuing they have understood the relevance of what they are learning to the waste sustainable resource management sectors will be more important than recalling detail. Therefore assessment by open-book would be appropriate for this Unit. It is recommended that each Outcome is independently assessed.				
DE3R 34	Personal Development Planning	Holistic approach to creating, maintaining and presenting a portfolio of evidence Production of portfolio of evidence of evidence of personal development and plans. Conducted open-book.				
FO3K 33	Job Costing and Business Calculations	Outcomes 1 and 2 should be assessed using a project where the learner is given information from which all work and materials would be costed and the associated business documents completed. The assessment should be conducted under controlled conditions.				
DN38 34	Sustainable Development	The assessment for this Outcome should be an extended response question under-taken under open-book conditions. Suggested length in the region of 1,500 words.	The assessment for this Outcome should be an extended response question under-taken under open-book conditions. Suggested length in the region of 1,500 words.			
H1KP 34	Human Resource Management: Introduction	Could be assessed through the use of short response questions designed to cover all of the Evidence Requirements for this Outcome. The assessment should be conducted under open-book conditions.	Outcomes 2 and 3 lend themselves to holistic assessment through the use of a combined assessment. A case study and report (of around 1,500 words or equivalent) being the optimum to allow learners to learn through assessment. It is possible to assess Outcomes 2 and 3 by generating evidence towards the end of the Unit. A given set of questions will assist learners in structuring their response which will allow them to base their analysis on a case study in reference to a particular situation.			
DV0N 35	Plan an Environmental Management System	Assessment can reflect the approach taken by an individual centre. All Outcomes should be assessed by a single holistic assessment in the form of a case study based on the environmental management of an organization, to demonstrate their knowledge and skills by showing that they can describe the relevant components of Environmental management systems: ISO14001 or EMAS. Conducted under Open-book conditions.				

6 Guidance on approaches to delivery and assessment

A significant amount of care has gone into the Unit contents and the assessment of the candidate knowledge and skills. To this end, Units have been specifically designed to complement each other whilst at the same time, eliminating overlap of content across the Units.

It is recommended that learners study the key contributing Units prior to completing the Graded Unit.

6.1 Sequencing/integration of Units

This programme requires learners' to achieve a minimum of 12 credits.

Centres may decide to offer this in a variety of ways to suit local conditions. For example, it would be possible to offer this programme:

♦ Full time, covering one academic year.
♦ Part-time:
  — Day release, covering a minimum of two academic years
  — Part-time infill, covering a minimum of two academic years
  — Evening class, covering a minimum of two academic years
  — Blended learning based upon an individual programme designed for the learner
  — Distance learning through structured design covering two academic years with learners receiving support and guidance via a mix of:
    – Work shops
    – Dedicated subject specialist academic support from lecturing staff
    – Electronic means of dispersing programme material and assessment
  — Optional support from a work based mentor

A suggested sequence of delivery is provided below. All Units are designed to be stand-alone and can therefore be delivered in any order. It is recommended that the Graded Unit is completed near the end of the programme in order that the delivery of the selected HN Units has been completed. Delivery is at the discretion of the centre.

HNC Sustainable Resource Management for delivery over two years

	1st teaching block	2nd teaching block
Year 1	Personal Development Planning (1credit) and Fundamentals of Sustainable Resource Management0: Science and Technologies (2 credits)	Project Management: An Introduction (1 credit) and Sustainable Resource Management: Materials and Resources (2 credits)
Year 2	Human Resource Management: Introduction (1 credit) and Sustainable Resource Management: Permitting and Operational Practice (2 credits)	Sustainable Resource Management: Graded Unit 1 (1 credit) and Sustainable Resource Management: Waste Policy and Legislation (2 credits)

Guidance for the assessment of each Unit is given within the Unit Specification.

Introducing the assessment requirements for the Unit early on in the delivery is recommended. In so doing, learners may feel encouraged to commence research and relevant readings earlier, etc.

6.2   Recognition of Prior Learning

SQA recognises that learners gain knowledge and skills acquired through formal, non-formal and informal learning contexts.

In some instances, a full Group Award may be achieved through the recognition of prior learning. However, it is unlikely that a learner would have the appropriate prior learning and experience to meet all the requirements of a full Group Award.

The recognition of prior learning may **not** be used as a method of assessing in the following types of Units and assessments:

♦   HN Graded Units
♦   Other integrative assessment Units (which may or not be graded)
♦   Certain types of assessment instruments where the standard may be compromised by not using the same assessment method outlined in the Unit
♦   Where there is an existing requirement for a licence to practice
♦   Where there are specific health and safety requirements
♦   Where there are regulatory, professional or other statutory requirements
♦   Where otherwise specified in an Assessment Strategy

More information and guidance on the *Recognition of Prior Learning* (RPL) may be found on our website **www.sqa.org.uk**

The following table outlines how existing SQA Units may contribute to this Group Award.

Unit title	Unit Code	Mandatory/ Option	Credit value
Personal Development Planning	DE3R 34	Option	1
Job Costing and Business Calculations	F03K 33	Option	1
Sustainable Development	DN38 34	Option	1
Project Management: An Introduction	F1NH 34	Option	1
Human Resource Management: Introduction	J2FH 34*	Option	1
Plan an Environmental Management System	DV0N 35	Option	2

*Refer to History of Changes for revision changes.

6.2.1 Articulation and/or progression

It may be possible for a learner achieving the HNC Sustainable Resource Management to articulate and/or progress onto a series of different qualifications. This would be under the direction of the learner's centre and articulating institution.

This HNC concentrates on developing processes and skills, as well as subject content. It can also enable learners to progress, if they wish, to an HND or into 2nd year degree programmes

Articulation and Progression from the HNC Sustainable Resource Management

Higher Education

The Scottish Funding Council report **Articulation For All (2007)** highlighted the value of Higher National awards as an accessible stepping stone to a degree programme. A number of learners completing the HNC Sustainable Resource Management award at SCQF level 7 will progress to further study, either through an HND programme or directly to first/second year degree programmes.

Articulation is possible into SCQF level 8 programmes in, for example:

♦ Business and Environment
♦ Environment and Sustainability
♦ Environmental Biology
♦ Environmental Management
♦ Environmental Science
♦ Environmental Sustainability
♦ Sustainable Development
♦ Waste Management

Articulation into SCQF level 8 programmes will be at the discretion of the awarding institution.

6.2.2 Professional recognition

There is no professional recognition.

6.2.3 Transitional Arrangements

No transition arrangement exists.

6.2.4 Credit transfer

No credit transfer arrangement exists.

6.3 Opportunities for e-assessment

There are considerable opportunities for Online and Distance Learning and Assessment of this Unit.

It is possible to co-ordinate the learning and teaching/assessment programme through a Virtual Learning Environment (VLE) which would allow geographically dispersed learners to initiate, develop and maintain contact with each other. Centres that wish to use Information and Communication Technology (ICT) must ensure that the national standard is applied to all learner evidence and that conditions of assessment as specified in the Evidence Requirements are met, regardless of the mode of gathering evidence. Further advice is available in *SQA Guidelines on Online Assessment for Further Education (AA1641, March 2003)* or latest issue if this version is superseded.

6.4 Support materials

Centres can create their own assessment instruments. They may also wish to have these instruments of assessment prior verified before use.

The Chartered Institution of Wastes Management, Zero Waste or EUskills may also be able to provide relevant and valid sources of information to assist centres and learners to meet the requirements of the HNC Sustainable Resource Management. A list of existing ASPs is available to view on SQA's website.

6.5 Resource requirements

Neither the delivery of the HNC Sustainable Resource Management nor its assessment requires specialist laboratory equipment. Learners should be encouraged to research recommended sites on the internet to access the most current information. Site visits to transfer stations, landfill sites, recycling facilities, etc are also recommended as Learners can see waste sustainable resource management sector operations in action but also get first hand information from delivering staff.

7 General information for centres

Equality and inclusion

The Unit specifications making up this Group Award have been designed to ensure that there are no unnecessary barriers to learning or assessment. The individual needs of learners will be taken into account when planning learning experiences, selecting assessment methods or considering alternative evidence. Further advice can be found on our website **www.sqa.org.uk/assessmentarrangements**.

Internal and external verification

All instruments of assessment used within this/these qualification(s) should be internally verified, using the appropriate policy within the centre and the guidelines set by SQA.

External verification will be carried out by SQA to ensure that internal assessment is within the national guidelines for these qualifications.

Further information on internal and external verification can be found in *SQA's Guide to Assessment* **(www.sqa.org.uk/GuideToAssessment)**

8   Glossary of terms

Accreditation of Prior Experiential Learning (APEL) is a process through which recognition is given for learning that occurs outside the traditional academic model.

Chartered Institution of Wastes Management (CIWM) is the professional body which represents waste and resource professionals working in the sustainable waste and resource management sectors worldwide. CIWM sets the professional standards for individuals working in the industry and has various grades of membership determined by education, qualification and experience

Embedded Core Skills: is where the assessment evidence for the Unit also includes full evidence for complete Core Skill or Core Skill components. A learner successfully completing the Unit will be automatically certificated for the Core Skill. (This depends on the Unit having been successfully audited and validated for Core Skills certification.)

Finish date: The end of a Group Award's lapsing period is known as the finish date. After the finish date, the Group Award will no longer be live and the following applies:

♦   candidates may not be entered for the Group Award
♦   the Group Award will continue to exist only as an archive record on the Awards Processing System (APS)

Graded Unit: Graded Units assess learners' ability to integrate what they have learned while working towards the Units of the Group Award. Their purpose is to add value to the Group Award, making it more than the sum of its parts, and to encourage learners to retain and adapt their skills and knowledge. (**Note to writer:** delete if not applicable to product type)

Higher National Certificate (HNC): is a qualification requiring in the region of 480 hours of structured learning which is assessed at SCQF level 7.

Lapsing date: When a Group Award is entered into its lapsing period, the following will apply:

♦   the Group Award will be deleted from the relevant catalogue
♦   the Group Award specification will remain until the qualification reaches its finish date at which point it will be removed from SQA's website and archived
♦   no new centres may be approved to offer the Group Award
♦   centres should only enter candidates whom they expect to complete the Group Award during the defined lapsing period

National Occupational Standards (NOSs) Designed by the sector skills council in consultation with stakeholders. They explain the relevant competence required by employees in occupations at different levels within the industry.

Scottish Qualifications Authority (SQA): is the national accreditation and awarding body in Scotland for HNCs.

SQA credit value: The credit value allocated to a Unit gives an indication of the contribution the Unit makes to an SQA Group Award. An SQA credit value of 1 given to an SQA Unit represents approximately 40 hours of programmed learning, teaching and assessment.

SCQF: The Scottish Credit and Qualification Framework (SCQF) provide the national common framework for describing all relevant programmes of learning and qualifications in Scotland. SCQF terminology is used throughout this guide to refer to credits and levels. For further information on the SCQF visit the SCQF website at **www.scqf.org.uk**.

SCQF credit points: SCQF credit points provide a means of describing and comparing the amount of learning that is required to complete a qualification at a given level of the Framework. One National Unit credit is equivalent to 6 SCQF credit points. One National Unit credit at Advanced Higher and one Higher National Unit credit (irrespective of level) is equivalent to 8 SCQF credit points.

SCQF levels: The level a qualification is assigned within the framework is an indication of how hard it is to achieve. The SCQF covers 12 levels of learning. HNCs and HNDs are available at SCQF levels 7 and 8 respectively. Higher National Units will normally be at levels 6–9 and Graded Units will be at level 7 and 8. National Qualification Group Awards are available at SCQF levels 2–6 and will normally be made up of National Units which are available from SCQF levels 2–7.

Subject Unit: Subject Units contain vocational/subject content and are designed to test a specific set of knowledge and skills.

Signposted Core Skills: refers to opportunities to develop Core Skills arise in learning and teaching but are not automatically certificated.

History of changes

It is anticipated that changes will take place during the life of the qualification and this section will record these changes. This document is the latest version and incorporates the changes summarised below. Centres are advised to check SQA's APS Navigator to confirm they are using the up to date qualification structure.

NOTE: Where a Unit is revised by another Unit:

♦   No new centres may be approved to offer the Unit which has been revised.
♦   Centres should only enter candidates for the Unit which has been revised where they are expected to complete the Unit before its finish date.

Version Number	Description	Date
02	**Revision of Unit:** H1KP 34 Human Resource Management: Introduction has been replaced by J2FH 34 Human Resource Management: Introduction. H1KP 34 will finish 31/07/2021	19/07/19

Acknowledgement

SQA acknowledges the valuable contribution that Scotland's colleges have made to the development of this qualification.

9　General information for learners

This section will help you decide whether this is the qualification for you by explaining what the qualification is about, what you should know or be able to do before you start, what you will need to do during the qualification and opportunities for further learning and employment.

The HNC Sustainable Resources Management is designed to allow you to develop knowledge and understanding of the requirements of the modern waste sustainable resource management sector. This should help you to perform more effectively in the various roles which might be expected of you during a career in the waste sustainable resource management sector.

This qualification will give you the required knowledge and understanding of the waste sustainable resource management sector to enable you to understand the complexities of the waste sustainable resource management sector and to explain where it would be appropriate to seek specialist support, eg in legislation, in technology, or in environmental issues etc.

You may be invited to an interview during which general advice about Sustainable Resource and the specific nature of HNC Sustainable Resource Management should be discussed.

If you are a school leaver you may be advised to consider completing one of the under-noted programmes of study in order to benefit from having attained the skills, knowledge and understanding required by one or more of the following or equivalent qualifications and/or experience:

♦ Any two relevant National Courses at SCQF level 5
♦ Certificate — Principles of Sustainable Resource Management at SCQF level 5
♦ SVQs at level 5:

　　— Frontline Environmental Services
　　— Waste Operations: Waste Collection Driver
　　— Waste Operations: Waste Collection Operative
　　— Waste Operations: Waste Site Operative
　　— Waste Operations: Waste Team Leader
　　— Waste Operations: Waste Weighbridge Operative

♦ Chartered institution of Wastes Management Waste Awareness Certificate
♦ Certificate — Principles of Sustainable Resource Management at SCQF level 6

Within the interview it should be possible to gain clarification from you about the nature of your experience. This may allow the centre to consider recognising your previous experience for a possible claim for Accreditation of Prior Experiential Learning (APEL).

The HNC Sustainable Resource Management has been designed to offer knowledge and skills about the theory, processes and practices that are to be found within the modern waste sustainable resource management sector.

The HNC Sustainable Resource Management has not been designed to focus on the specific requirements of specialist or narrow focused sectors, eg Forestry or Aquaculture. Learners participating in the interview may therefore elect to seek information about alternative sectors prior to agreeing enrolment onto the HNC Sustainable Resource Management.

The HNC Sustainable Resource Management has a number of aims which are provided below:

1 Develop suitable competences to enhance their career within the above.
2 Progress further professional, academic or vocational qualifications, to include progression within SCQF.
3 Provide a basis for future career and personal development.
4 Build on previously acquired transferable skills.

Specific aims of the qualification are:

1 Equip candidates with the knowledge and understanding to material and resource use within the Economy and the waste sustainable resource management sectors.
2 To develop the knowledge and understanding of how the waste sustainable resource management sector responds to the challenges posed by material and resource usage.
3 Support the development of innovative and creative approaches to work and enable to quick responses to the challenges posed by changes in the waste sustainable resource management sector
4 Develop an understanding of the requirements which underpin the management of materials and resources utilisation as they impact upon the waste sustainable resource management sectors.
5 Develop the knowledge and understanding of relevant national and local waste, recycling and resource recovery strategies.

The structure of the award is 9 mandatory credits, these are 'specialist' Units pertaining to the waste sustainable resource management sectors and 3 optional credits, which can be chosen from areas such as personal development planning, project management, human resource management or planning an environmental management system.

You will need to achieve 12 credits, including the Graded Unit, to be awarded the HNC Sustainable Resources Management.

If you lack experience in the waste sustainable resource management sector, your centre may recommend you commence by under taking the Unit *Sustainable Resource Management: An Introduction* and the Unit *Job Costing and Business Documents*.

Assessment can take a variety of formats from investigatory reports and case studies to open-book assessment.

Throughout the award you will be given opportunities to develop the Core Skills of *Communication, Numeracy, Information and Communication Technology (ICT), Problem Solving* and *Working with Others*. Although there is no automatic certification of Core Skills or Core Skill components.

It is recommended that you are encouraged to visit as many different sites and facilities of the waste sustainable resource management sector to develop a deep understanding of the importance of proper and appropriate management of waste.

As part of the HNC Sustainable Resource Management you will be expected to complete a Graded Unit at SCQF level 7. This is designed to provide evidence that you have achieved the principal aim of the HNC Sustainable Resources Management:

♦ To offer education, learning and development opportunities for those employed, or aspiring to employment, in the waste sustainable resource management sector.

This Graded Unit is designed to provide evidence that you can demonstrate an understanding of the role of waste/resource management within society. You will have an opportunity to demonstrate knowledge and skills in a key area of your study and to explore the impact of developments affecting the industry.

The type of Graded Unit you will be asked to complete is an investigative project. You will be able to demonstrate: research, analysis and evaluative skills acquired during the course. It will allow you to use reporting skills, evidenced by the three stages required by the Graded Unit.

The Graded Unit will be marked out of 100. Assessors will aggregate the marks you achieve to arrive at an overall mark for the investigative project. Assessors will then assign a grade for your Graded Unit based on the following grade boundaries.

♦   A = 70%–100%
♦   B = 60%–69%
♦   C = 50%–59%

Further information on the format and content of the Graded Unit will be given to you by lecturing staff at the start of your course.

The HNC Sustainable Resource Management will assist you to develop processes and skills, as well as subject content. It can also enable you to progress, if you wish, to a number of HNDs or into 2nd year degree programmes

Articulation and Progression from the HNC Sustainable Resource Management

Higher Education

The Scottish Funding Council report *Articulation For All (2007)* highlighted the value of Higher National awards as an accessible stepping stone to a degree programme. Upon completion of the HNC Sustainable Resource Management award at SCQF level 7 you may wish to progress to further study, either through an HND programme or directly to first/second year degree programmes.

Articulation is possible into SCQF level 8 programmes in, for example:

♦   Business and Environment
♦   Environment and Sustainability
♦   Environmental Biology
♦   Environmental Management
♦   Environmental Science
♦   Environmental Sustainability
♦   Sustainable Development
♦   Waste Management

Articulation into SCQF level 8 programmes will be at the discretion of the awarding institution.

Employment opportunities within the waste sustainable resource management sector are wide and will depend upon previous work experience.