

Level 2 Awards in Resource Efficiency (7530- 02)

February 2012 Version 1.0



Qualification at a glance

Subject area	Resource Efficiency
City & Guilds number	7530
Age group approved	16+
Support materials	Centre handbook Assessment pack
Registration/ certification dates	See City & Guilds website for details

Title and level	City & Guilds number	Accreditation number
Level 2 Award in Contributing to Business Resource Efficiency	7530-02	600/2369/7
Level 2 Award in Energy Efficiency in the Workplace	7530-02	600/2376/4
Level 2 Award in Waste Management in the Workplace	7530-02	600/2364/8
Level 2 Award in Water Efficiency in the Workplace	7530-02	600/2368/5



Contents

1	Introduction	4
	Structure	5
2	Centre requirements	6
	Approval	6
	Resource requirements	6
	Candidate entry requirements	6
3	Delivering the qualification	7
	Initial assessment and induction	7
4	Assessment	8
	Assessment of the qualification	8
5	Units	9
Unit 201	Contributing to business resource efficiency	10
Unit 202	Energy efficiency in the workplace	13
Unit 203	Waste management in the workplace	15
Unit 204	Water efficiency in the workplace	17
Appendix 1	Sources of general information	20



1 Introduction

This document tells you what you need to do to deliver the qualifications:

Area	Description
Who are these qualifications for?	The City & Guilds Level 2 Awards in Resource Efficiency are suitable for people that work in operational, 'shop-floor' or technician roles within organisations that wish to improve the resource efficiency of their operations. The qualifications allow candidates to learn, develop and practise the skills required to minimise impacts related to the waste, water, energy and transport use of an organisation.
Is [are] the qualification[s] part of a framework or initiative?	At time of writing these qualifications are not part of any other initiative, however consideration is being given to including these qualifications as optional units in Apprenticeships and some Apprenticeship Frameworks.
Who did we develop the qualification with?	The qualifications were developed by Cogent Sector Skills Council in collaboration with eight other SSCs and two awarding organisations.
What opportunities for progression are there?	Learners may wish to progress to higher level qualifications in Resource Efficiency, Sustainability or Carbon Management.

Structure

To achieve the Level 2 Award in Contributing to Business Resource Efficiency (7530-02), learners must achieve the following unit.

Level 2 Award in Contributing to Business Resource Efficiency			
Unit accreditation number	City & Guilds unit number	Unit title	Credit value
Mandatory			
M/502/8394	201	Contributing to business resource efficiency	10

To achieve the Level 2 Award in Energy Efficiency in the Workplace (7530-02), learners must achieve the following unit.

Level 2 Award in Energy Efficiency in the Workplace			
Unit accreditation number	City & Guilds unit number	Unit title	Credit value
Mandatory			
Y/502/8390	202	Energy efficiency in the workplace	2

To achieve the Level 2 Award in Waste Management in the Workplace (7530-02), learners must achieve the following unit.

Level 2 Award in Waste Management in the Workplace			
Unit accreditation number	City & Guilds unit number	Unit title	Credit value
Mandatory			
K/502/8393	203	Waste management in the workplace	2

To achieve the Level 2 Award in Water Efficiency in the Workplace (7530-02), learners must achieve the following unit.

Level 2 Award in Water Efficiency in the Workplace			
Unit accreditation number	City & Guilds unit number	Unit title	Credit value
Mandatory			
D/502/8391	204	Water efficiency in the workplace	2



2 Centre requirements

Approval

To offer these qualification, new centres will need to gain both centre and qualification approval. Please refer to the *Centre Manual - Supporting Customer Excellence* for further information.

Centre staff should familiarise themselves with the structure, content and assessment requirements of the qualification[s] before designing a course programme.

Resource requirements

Centre staffing

Staff delivering these qualifications must be able to demonstrate that they meet the following occupational expertise requirements. They should:

- be occupationally competent or technically knowledgeable in the area[s] for which they are delivering training and/or have experience of providing training. This knowledge must be to the same level as the training being delivered
- have recent relevant experience in the specific area they will be assessing
- have credible experience of providing training.

Centre staff may undertake more than one role, eg tutor and assessor or internal verifier, but cannot internally verify their own assessments.

Assessors and internal verifiers

Centre staff should hold, or be working towards, the relevant Assessor/Verifier (A/V) units for their role in delivering, assessing and verifying these qualifications or meet the relevant experience requirements outlined above.

Continuing professional development (CPD)

Centres must support their staff to ensure that they have current knowledge of the occupational area, that delivery, mentoring, training, assessment and verification is in line with best practice, and that it takes account of any national or legislative developments.

Candidate entry requirements

City & Guilds does not set entry requirements for these qualifications. However, centres must ensure that candidates have the potential and opportunity to gain the qualifications successfully.

Age restrictions

There is no age restriction for these qualifications unless this is a legal requirement of the process or the environment.



3 Delivering the qualification

Initial assessment and induction

An initial assessment of each candidate should be made before the start of their programme to identify:

- if the candidate has any specific training needs,
- support and guidance they may need when working towards their qualifications.
- any units they have already completed, or credit they have accumulated which is relevant to the qualification[s].
- the appropriate type and level of qualification.

We recommend that centres provide an induction programme so the candidate fully understands the requirements of the qualification[s], their responsibilities as a candidate, and the responsibilities of the centre. This information can be recorded on a learning contract.



4 Assessment

Assessment of the qualification

Candidates must:

- successfully complete one assignment for each mandatory unit.

Unit Number	Unit Title	Assessment method	Where to obtain assessment materials
Level 2 Award in Contributing to Business Resource Efficiency			
201	Contributing to Business Resource Efficiency	Assignment	*
Level 2 Award in Energy Efficiency in the Workplace			
202	Energy Efficiency in the Workplace	Assignment	*
Level 2 Award in Waste Management in the Workplace			
203	Waste Management in the Workplace	Assignment	*
Level 2 Award in Water Efficiency in the Workplace			
204	Water Efficiency in the Workplace	Assignment	*

***The assignment can be found at www.cityandguilds.com, and by navigating to the 7530 page. The password for the assignment is available on the Walled Garden.**



5 Units

Availability of units

Structure of units

These units each have the following:

- City & Guilds reference number
- unit accreditation number
- title
- level
- credit value
- endorsement by a sector or other appropriate body
- information on assessment
- learning outcomes which are comprised of a number of assessment criteria
- notes for guidance.

Summary of units

Unit Number	Unit Title	Credits	QCF unit number
201	Contributing to business resource efficiency	10	M/502/8394
202	Energy efficiency in the workplace	2	Y/502/8390
203	Waste management in the workplace	2	K/502/8393
204	Water efficiency in the workplace	2	D/502/8391

UAN:	M/502/8394
Level:	Level 2
Credit value:	10
GLH:	60
Endorsement by a sector or other appropriate body:	This unit is endorsed by Cogent, the Sector Skills Council for chemicals, pharmaceuticals, nuclear, oil and gas, petroleum and polymer businesses.

Learning outcome
The learner will:
1 Know the importance of resource efficiency for business
Assessment criteria
The learner can:
1.1 describe what is meant by resource efficiency for business
1.2 describe how the efficient use of resources supports sustainability within a selected organisation
1.3 describe why the efficient use of resources is important to sustainability in relation to environmental, economic and social factors
1.4 identify how waste minimisation supports sustainability of business.

Range
Resource efficiency: reduce, reuse, recycle, creation of new markets, money saving
Resources: waste, water, transport, energy

Learning outcome
The learner will: 2 Know how to identify opportunities for waste management in business
Assessment criteria
The learner can: 2.1 assess potential sources of waste for a selected organisation 2.2 describe how waste can be avoided and minimised through recycling and re-use 2.3 describe how organisational procedures support resource efficiency.

Range
Recycling and re-use: paper, plastic, water, other waste Organisational procedures: policies and procedures; communication; implementation; roles and responsibilities

Learning outcome
The learner will: 3 Know targets for resource efficiency within a business
Assessment criteria
The learner can: 3.1 identify relevant business resource efficiency targets 3.2 describe the importance of business resource efficiency targets.

Range
Targets: energy, water, waste, transport, carbon Importance: encourage measurement, encouragement management

Learning outcome
The learner will: 4 Be able to recommend changes within a business that support resource efficiency
Assessment criteria
The learner can: 4.1 report accurately opportunities to improve the organisational efficiency of resource usage 4.2 report accurately areas for resource efficiency improvement within organisational procedures 4.3 present appropriate recommendations for changes within a selected business to support resource efficiency.

Learning outcome	
The learner will:	
5	Be able to improve personal working practices in support of resource efficiency for business
Assessment criteria	
The learner can:	
5.1	describe own opportunities for improving organisational resource efficiency
5.2	carry out work safely and in accordance with organisational procedures to actively maximise efficient use of resources, including waste minimisation
5.3	assist key personnel with the implementation of measures to improve resource efficiency within a selected business and limits of own authority.

UAN:	Y/502/8390
Level:	Level 2
Credit value:	2
GLH:	12
Endorsement by a sector or other appropriate body:	This unit is endorsed by Cogent, the Sector Skills Council for chemicals, pharmaceuticals, nuclear, oil and gas, petroleum and polymer businesses.

Learning outcome
The learner will: 1 Know the importance of efficient energy usage to sustainability
Assessment criteria
The learner can: 1.1 describe how the efficient use of energy supports sustainability 1.2 describe why the efficient use of energy is important to the environment 1.3 describe the social benefits associated with efficient energy usage.

Range
Sustainability: economic benefits (lower energy bills, legal requirements); commercial benefits; social benefits; environmental benefits Important: climate change; minimise and avoid land contamination, air pollution and water pollution; conserve natural resources; protect natural habitats Social benefits: health, wellbeing, affordable warmth, air quality

Learning outcome
The learner will: 2 Know how to identify opportunities for improved energy efficiency
Assessment criteria
The learner can: 2.1 outline the opportunities , within a selected organisation, for improving the efficient use of energy 2.2 describe commonly used energy efficiency measures , including the use of renewable energy .

Range
Opportunities: energy sources; energy uses, energy usage; energy hierarchy Energy efficient measures: energy efficient lighting; energy efficient equipment; double-glazing/insulation; time controllers; thermostats Renewable energy: biomass, solar Pr, solar thermal, heat pumps

Learning outcome
The learner will: 3 Be able to work to improve energy efficiency for an organisation
Assessment criteria
The learner can: 3.1 describe how organisational working practices support energy efficiency 3.2 produce a plan to improve energy efficiency for a selected organisation 3.3 assist with the implementation of measures to promote the efficient use of energy for a selected organisation.

Range
Working practices: policies and procedures; communication; implementation; roles and responsibilities

UAN:	K/502/8393
Level:	Level 2
Credit value:	2
GLH:	12
Endorsement by a sector or other appropriate body:	This unit is endorsed by Cogent, the Sector Skills Council for chemicals, pharmaceuticals, nuclear, oil and gas, petroleum and polymer businesses.

Learning outcome
The learner will:
1 Know the importance of sustainable waste management
Assessment criteria
The learner can:
1.1 describe how waste management supports sustainability
1.2 describe why waste management is important to the environment
1.3 describe the social benefits associated with waste management.

Range
Sustainability: economic benefits (lower waste disposal costs, legal requirements); commercial benefits; social benefits; environmental benefits
Important: minimise and avoid land contamination; air pollution and water pollution; conserve natural resources; protect natural habitats
Social benefits: health and wellbeing (clean water, air quality, soil quality)

Learning outcome
The learner will: 2 Know how to identify opportunities for minimising waste
Assessment criteria
The learner can: 2.1 outline the opportunities , within a selected organisation, for minimising waste 2.2 describe how waste can be avoided and minimised through recycling and re-use .

Range
Opportunities: waste review, waste streams, waste hierarchy Recycling and re-use: paper, plastic, water, other waste

Learning outcome
The learner will: 3 Be able to work to minimise waste for an organisation
Assessment criteria
The learner can: 3.1 describe how organisational working practices support effective waste management 3.2 produce a plan to improve the management of waste for a selected organisation 3.3 assist with the implementation of measures to promote the effective management of waste for a selected organisation.

Range
Working practices: policies and procedures; communication; implementation; roles and responsibilities

UAN:	D/502/8391
Level:	Level 2
Credit value:	2
GLH:	12
Endorsement by a sector or other appropriate body:	This unit is endorsed by Cogent, the Sector Skills Council for chemicals, pharmaceuticals, nuclear, oil and gas, petroleum and polymer businesses.

Learning outcome
The learner will:
1 Know the importance of efficient water usage to sustainability
Assessment criteria
The learner can:
1.1 describe how the efficient use of water supports sustainability
1.2 describe why the efficient use of water is important to the environment
1.3 describe the social benefits associated with efficient water use.

Range
Sustainability: economic benefits (lower water bills, legal requirements); commercial benefits; social benefits; environmental benefits
Important: minimise and avoid water pollution; conserve natural resources; protect natural habitats
Social benefits: health and wellbeing (clean drinking water); water availability; recreation and amenity

Learning outcome
The learner will: 2 Know how to identify opportunities for improved water efficiency
Assessment criteria
The learner can: 2.1 outline the opportunities , for improving the efficient use of water, within a selected organisation 2.2 describe how water waste can be avoided and minimised through recycling and re-use .

Range
Opportunities: water sources; water uses; water usage; water hierarchy Recycling and re-use: paper, plastic, water, other waste.

Learning outcome
The learner will: 3 Be able to work to improve water efficiency for an organisation
Assessment criteria
The learner can: 3.1 describe how organisational working practices support water efficiency 3.2 produce a plan to improve water efficiency for a selected organisation 3.3 assist with the implementation of measures to promote the efficient use of water for a selected organisation.

Range
Working practices: policies and procedures; communication; implementation; roles and responsibilities



Relationships to other qualifications

Literacy, language, numeracy and ICT skills development

These qualifications can develop skills that can be used in the following qualifications:

- Functional Skills (England) – see **www.cityandguilds.com/functionalskills**
- Essential Skills (Northern Ireland) – see **www.cityandguilds.com/essentialskillsni**
- Essential Skills Wales (from September 2010). – see **www.cityandguilds.com/esw**



Appendix 1 Sources of general information

The following documents contain essential information for centres delivering City & Guilds qualifications. They should be referred to in conjunction with this handbook. To download the documents and to find other useful documents, go to the **Centres and Training Providers homepage** on **www.cityandguilds.com**.

Centre Manual - Supporting Customer Excellence contains detailed information about the processes which must be followed and requirements which must be met for a centre to achieve 'approved centre' status, or to offer a particular qualification, as well as updates and good practice exemplars for City & Guilds assessment and policy issues. Specifically, the document includes sections on:

- The centre and qualification approval process
- Assessment, internal quality assurance and examination roles at the centre
- Registration and certification of candidates
- Non-compliance
- Complaints and appeals
- Equal opportunities
- Data protection
- Management systems
- Maintaining records
- Assessment
- Internal quality assurance
- External quality assurance.

Access to Assessment & Qualifications provides full details of the arrangements that may be made to facilitate access to assessments and qualifications for candidates who are eligible for adjustments in assessment.

The **centre homepage** section of the City & Guilds website also contains useful information such on such things as:

- **Walled Garden:** how to register and certificate candidates on line
- **Qualifications and Credit Framework (QCF):** general guidance about the QCF and how qualifications will change, as well as information on the IT systems needed and FAQs
- **Events:** dates and information on the latest Centre events
- **Online assessment:** how to register for GOL/e-volve assessments.

Useful contacts

UK learners

General qualification information

T: +44 (0)844 543 0033

E: learnersupport@cityandguilds.com

International learners

General qualification information

T: +44 (0)844 543 0033

F: +44 (0)20 7294 2413

E: intcg@cityandguilds.com

Centres

Exam entries, Certificates,
Registrations/enrolment,
Invoices, Missing or late exam
materials, Nominal roll reports,
Results

T: +44 (0)844 543 0000

F: +44 (0)20 7294 2413

E: centresupport@cityandguilds.com

Single subject qualifications

Exam entries, Results,
Certification, Missing or late exam
materials, Incorrect exam papers,
Forms request (BB, results entry),
Exam date and time change

T: +44 (0)844 543 0000

F: +44 (0)20 7294 2413

F: +44 (0)20 7294 2404 (BB forms)

E: singlesubjects@cityandguilds.com

International awards

Results, Entries, Enrolments,
Invoices, Missing or late exam
materials, Nominal roll reports

T: +44 (0)844 543 0000

F: +44 (0)20 7294 2413

E: intops@cityandguilds.com

Walled Garden

Re-issue of password or
username, Technical problems,
Entries, Results, GOLA/e-volve,
Navigation, User/menu option,
Problems

T: +44 (0)844 543 0000

F: +44 (0)20 7294 2413

E: walledgarden@cityandguilds.com

Employer

Employer solutions, Mapping,
Accreditation, Development
Skills, Consultancy

T: +44 (0)121 503 8993

E: business@cityandguilds.com

Publications

Logbooks, Centre documents,
Forms, Free literature

T: +44 (0)844 543 0000

F: +44 (0)20 7294 2413

Every effort has been made to ensure that the information contained in this publication is true and correct at the time of going to press. However, City & Guilds' products and services are subject to continuous development and improvement and the right is reserved to change products and services from time to time. City & Guilds cannot accept liability for loss or damage arising from the use of information in this publication.

If you have a complaint, or any suggestions for improvement about any of the services that we provide, email: **feedbackandcomplaints@cityandguilds.com**

About City & Guilds

As the UK's leading vocational education organisation, City & Guilds is leading the talent revolution by inspiring people to unlock their potential and develop their skills. We offer over 500 qualifications across 28 industries through 8500 centres worldwide and award around two million certificates every year. City & Guilds is recognised and respected by employers across the world as a sign of quality and exceptional training.

City & Guilds Group

The City & Guilds Group operates from three major hubs: London (servicing Europe, the Caribbean and Americas), Johannesburg (servicing Africa), and Singapore (servicing Asia, Australia and New Zealand). The Group also includes the Institute of Leadership & Management (management and leadership qualifications), City & Guilds Land Based Services (land-based qualifications), the Centre for Skills Development (CSD works to improve the policy and practice of vocational education and training worldwide) and Learning Assistant (an online e-portfolio).

Copyright

The content of this document is, unless otherwise indicated, © The City and Guilds of London Institute and may not be copied, reproduced or distributed without prior written consent. However, approved City & Guilds centres and candidates studying for City & Guilds qualifications may photocopy this document free of charge and/or include a PDF version of it on centre intranets on the following conditions:

- centre staff may copy the material only for the purpose of teaching candidates working towards a City & Guilds qualification, or for internal administration purposes
- candidates may copy the material only for their own use when working towards a City & Guilds qualification

The *Standard Copying Conditions* (see the City & Guilds website) also apply.

Please note: National Occupational Standards are not © The City and Guilds of London Institute. Please check the conditions upon which they may be copied with the relevant Sector Skills Council.

Published by City & Guilds, a registered charity established to promote education and training

City & Guilds

1 Giltspur Street

London EC1A 9DD

T +44 (0)844 543 0000

F +44 (0)20 7294 2413

www.cityandguilds.com

HB-01-7530