



Australian Government

ICTSUS807 Conduct and manage a life cycle assessment for sustainability

Release: 1

ICTSUS807 Conduct and manage a life cycle assessment for sustainability

Modification History

Release	Comments
Release 1	This version first released with ICT Information and Communications Technology Training Package Version 2.0.

Application

This unit describes the skills and knowledge required to conduct a life cycle assessment (LCA) to investigate and evaluate the human health and environmental impacts arising from the provision of a product, process or service.

It applies to individuals who are excellent communicators with a very high level of technical management skills and knowledge of telecommunications networks and systems. In this role, individuals must be able to undertake detailed research, analysis and evaluation.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Telecommunications – sustainability

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Define and scope project goal	1.1 Access appropriate sources of information relevant to LCA project 1.2 Define goal of project 1.3 Specify information needed to inform decision makers 1.4 Determine required level of specificity 1.5 Determine data organisation and display of results

	1.6 Define scope of study 1.7 Determine ground rules for performing the work
2. Conduct life cycle inventory (LCI)	2.1 Generate life cycle flow diagram 2.2 Develop data collection plan for LCI 2.3 Collect actual data 2.4 Evaluate and document LCI results
3. Conduct life cycle impact assessment (LCIA)	3.1 Select and define impact categories 3.2 Classify LCI results to impact categories 3.3 Model LCI impacts within impact categories using science based conversion factors 3.4 Normalise potential impacts in ways that can be compared 3.5 Assign impact categories by grouping into one or more sets to facilitate interpretation of results 3.6 Assign weighting factors to emphasise most important potential impacts
4. Interpret and evaluate results from LCI and LCIA and communicate them	4.1 Identify significant issues based on LCI and LCIA 4.2 Evaluate completeness check, consistency check and sensitivity check 4.3 Make recommendations for improving product, process or service life cycle
5. Report results of LCA study	5.1 Document results of LCA study 5.2 Finalise report with conclusion, and make recommendations as a result of LCA study

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1, 1.2, 2.4, 4.2	Identifies, analyses and evaluates a range of complex documentation, including legislative frameworks and technical specifications

Writing	1.2-1.7, 2.1, 2.2, 3.1-3.6, 4.1, 4.3, 5.1, 5.2	Produces complex, detailed and well-structured media releases and other reports and procedures, using specific language and specialised terminology to convey an understanding of outcomes
Oral Communication	1.3, 4.3, 5.2	- Articulates clearly and creatively using specific language suitable for clients to convey requirements - Uses listening and questioning techniques to confirm understanding
Numeracy	3.6	Uses mathematical formulae to estimate CO₂ emissions, and analyse and confirm capacity, personnel and budgetary requirements and all other incidental LCA calculations
Get the work done	1.1, 1.2, 1.4-1.7, 2.1-2.3, 3.1-3.6, 4.1, 4.2	- Develops flexible plans for complex, high impact activities with strategic implications that involve a diverse range of stakeholders with potentially competing demands - Takes responsibility for defining key aspects of own workload, balancing own needs and priorities with those of the work group - Systematically gathers and analyses all relevant information and evaluates options to make high impact and informed decisions - Considers the strategic and operational potential of digital trends to achieve work goals, enhance work processes, create opportunities and reduce risks - Uses a broad range of strategies to store, access and organise virtual information, recognising that design choices will influence what information is retrieved and how it may be interpreted and used - Uses formal analytical and lateral thinking techniques for identifying issues, and generating and evaluating possible solutions

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICTSUS807 Conduct and manage a life	ICTSUS8238A Conduct and manage	Updated to meet Standards for	Equivalent unit

Code and title current version	Code and title previous version	Comments	Equivalence status
cycle assessment for sustainability	a life cycle assessment for sustainability	Training Packages	

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a53af4e4-b400-484e-b778-71c9e9d6aff2>

Assessment Requirements for ICTSUS807 Conduct and manage a life cycle assessment for sustainability

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Performance Evidence

Evidence of the ability to:

- scope and define the goals of a unique life cycle assessment (LCA) for sustainability
- produce a life cycle inventory (LCI) using relevant software and data collection strategies
- use life cycle assessment and other software for researching and interpreting charts, flowcharts, graphs and other visual data and information
- evaluate LCI and life cycle impact assessment (LCIA) results, using completeness, consistency and sensitivity checks
- make best practice recommendations based on the results of the LCA study.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- outline best practice approaches relevant to own work area
- summarise environmental and sustainability legislation, regulations and codes of practice applicable to the industry and organisation
- outline the need to consider equal opportunity, equity and diversity principles and work health and safety (WHS) when conducting sensitivity checks for policy development
- outline policy development processes and practices
- explain principles, practices and available tools and techniques of sustainability management relevant to the telecommunications industry
- outline quality assurance systems relevant to own organisation
- discuss relevant organisational policies, procedures and protocols
- explain relevant systems and procedures to aid in the achievement of workplace sustainability
- explain ICT power consumption calculations

- explain power consumption and energy audit methodology
- discuss estimating CO₂ emissions
- summarise environmental impacts of products, processes, systems and services.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the telecommunications – sustainability field of work and include access to:

- sites on which planning, design and integration of sustainability may be carried out
- relevant legislation, standards, guidelines, reports and equipment specifications and drawings
- a range of workplace documentation and personnel information and resources (such as compliance obligations, organisational plans and work responsibilities).

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

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