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| Title: | **Understanding utility services and energy efficiency in the workplace** |
| Level: | **3** |
| Credit value: | **2** |
| Unit guided learning hours | **7** |
| Learning outcomes (the learner will) | Assessment criteria (the learner can) |
| 1. Understand own organisation’s utility services requirements
 | 1.11.2 | Identify what utility services are required by own organisation and examine what are actually providedExplain the options of acquiring utility services to bridge the gap between own organisation’s requirements and actual provision |
| 1. Understand the efficiency of own organisation’s energy consumption
 | 2.12.22.3 | Explain the importance of energy management for own organisationExamine how own organisation measures energy requirements and actual consumption to determine efficiencyIdentify ways of improving own organisation’s energy efficiency |
| **Additional information about the unit** |  |
| Unit purpose and aim(s) | To develop knowledge and understanding of managing utility services and energy efficiency. |
| Details of the relationship between the unit and relevant national occupational standards or professional standards or curricula (if appropriate) | Links to Facilities Management 2008 NOS: FM324 |
| Assessment requirements or guidance specified by a sector or regulatory body (if appropriate) |  |
| Support for the unit from a sector skills council or other appropriate body (if required) | Asset Skills |
| Equivalencies agreed for the unit (if required) | M3.42 - Managing utility services and energy efficiency in the workplace |
| Location of the unit within the subject/sector classification system | 15.3 – Business Management |
| **Additional Guidance about the Unit** |
| **Indicative Content:** |
| 1 | * Range of utility services (for example gas, water, electricity, tele-communications. Alternative fuels and renewable energy sources - oil, solid fuel, solar, wind, bio-mass, geothermal)
* Ways of supplying utility services (for example based on location, range of suppliers, tariffs)
* Various options for procuring utility services (for example re-negotiation of supply and tariffs, national contracts, flexible contracting, collaborative procurement, using energy agents to secure best energy suppliers)
* Ways of conserving utilities (for example use of building management systems, presence detectors, grey-water systems)
* Alternative ways of improving utility usage (for example higher energy utilization, energy conservation, reduced consumption, thermal storage, heat recovery, condensing boilers)
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| 2 | * The importance of energy management and the role of the facilities manager in this (for example organisation Energy Policy and energy purchasing strategy, Building Energy Management Systems [BEMS], Energy Performance Certificates [EPCs])
* Sources of expertise in relation to energy management (for example The Carbon Trust, Building Research Establishment, Energy Institute, energy purchasing platforms and consultancies)
* Existing systems for monitoring, measuring and reporting on energy matters (meter and consumption data collection and analysis, targets, benchmarking, tariff structures)
* Improving energy efficiency (for example reducing carbon footprint, using energy from renewable sources, district cooling and heating, purchasing energy efficient plant and equipment. combined heat and power, use of ‘smart’ meters)
* Communication channels for making recommendations and suggestions to improve energy efficiency (for example awareness campaigns, ‘switch-off’ regimes and signage)
* The importance of regular maintenance and servicing of HEVAC equipment
* Certification schemes and standards (for example Eco-Management and Audit Scheme [EMAS], Part L Building Regulations, ISO 5001, EN16001)
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