Open Awards Qualification Unit

This unit forms part of a regulated qualification.

1 Unit Details

Unit Title:	How the World is Powered
Unit Reference Number:	Y/650/3624
Level:	Entry Level Two
Credit Value:	6
Minimum GLH:	50

2 Learning Outcomes and Criteria

Learning Outcome (The Learner will):	Assessment Criterion (The Learner can):
1. Know how natural sources of energy can be harnessed	1.1 State how individuals can harness energy from natural sources
	1.2 State how energy from natural sources can be converted for domestic use
2. Know about energy producers and the National Grid	2.1 Identify: • Renewable and • Non-renewable natural sources of energy
	2.2 Identify ways that natural sources of energy can be converted into power
	2.3 Identify how energy producing companies convert harnessed energy into power for use by homes and businesses
3. Know about the National Grid	3.1 Identify the role of the National Grid in the generation and distribution of electricity
	3.2 Identify how electricity from the National Grid is delivered to homes and businesses
	3.3 State how electricity is delivered to appliances in homes and businesses

4.	Know about household appliances that use electricity	4.1	Identify common household appliances that require electricity
		4.2	Identify small appliances that can be powered with batteries
		4.3	State how appliances may be powered with alternative power sources
5.	Know how electricity can be stored and generated	5.1	State the processes required to convert harnessed energy into electricity
		5.2	State the materials involved in converting harnessed energy to electricity
		5.3	State how generated electricity can be stored
		5.4	State the risks and issues involved in generating and transmitting electricity
6.	Know about the risks and benefits of generating and using electricity	6.1	Identify health and safety risks involved in generating and using electricity
		6.2	Identify the main benefits of using mains electricity to power homes and businesses
		6.3	Identify the environmental impacts of current methods of generating electricity
		6.4	State the environmental importance of sustainable sources of energy

Comment [GU]: involved in

Learning Outcome 1 - Indicative Content
Mining and Extracting Coal, Oil and Gas Harnessing power from water, wind and solar energy The National Grid and its role in supplying power How the National Grid delivers power – the workings of the National Grid in electricity Supply Energy return from renewables – how individuals can contribute excess power to the national supply
Learning Outcome 2 - Indicative Content
Domestic energy collection and generation – how individuals and communities can harness energy from solar and wind, convert this to electricity for their own use, and supply their excess electricity to the National Grid for national distribution
Learning Outcome 3 - Indicative Content
Learners should know how electricity is generated from different sources, including oil, gas and coil, and how energy is harnessed from the Sun, wind and water/wave power and converted into electricity Learners should also know the materials and equipment required to generate electricity from all sources: *coal, gas, oil, wind/wave, solar* The risks and issues related to generating and transmitting energy in the form of electricity