

MANAGE CLIMATE CHANGE AND GLOBAL WARMING

UNIT CODE: ENV/OS/MGT/CC/04/6/A

UNIT DESCRIPTION

This unit describes the competencies required to manage climate change and global warming. It involves managing effects of climate change and global warming, applying responses, mitigation and adaptation strategies and applying international policies and interventions to climate change.

| ELEMENTS These describe the key outcomes which make up workplace function. | PERFORMANCE CRITERIA These are assessable statements which specify the required level of performance for each of the elements. <i>Bold and italicized terms are elaborated in the Range.</i> |
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| 1. Manage effects of climate change and global warming | 1.1 <i>Effects of global warming and climate change</i> are identified 1.2 <i>Greenhouse gases</i> emission is controlled as per SOPs. 1.3 <i>Alternative sources of energy</i> are identified and applied based on available resources. 1.4 <i>Indicators</i> of global warming are monitored. |
| 2. Apply responses, mitigation and adaptation strategies to climate change. | 2.1 <i>Resource efficiency mechanisms</i> for resolving climate change issues are adapted locally and internationally. 2.2 Conference of parties (COP) recommendations are applied 2.3 <i>Technologies</i> are developed and transferred internationally. |
| 3. Apply international policies and interventions | 3.1 Carbon trading is implemented 3.2 Policies are regulated and enforced based on UNFCC (United nations Framework on climate change) 3.3 Relationship between climate and development is analysed. 3.4 Community is sensitized. |

RANGE

This section provides work environments and conditions to which the performance criteria apply. It allows for different work environments and situations that will affect performance.

| Variable | Range |
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| 1. Effects of global warming and climate change may include but not limited to: | <input type="checkbox"/> Drought <input type="checkbox"/> Flooding <input type="checkbox"/> Discoloration of coral reefs <input type="checkbox"/> Invasive species <input type="checkbox"/> Diseases (cholera, malaria, sun burns, skin cancer) |

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| 2. Greenhouse gases may include but not limited to: | <input type="checkbox"/> Methane <input type="checkbox"/> CO ₂ <input type="checkbox"/> CfC <input type="checkbox"/> Aerosols <input type="checkbox"/> Sulphur |
| 3. Alternative sources of energy may include but not limited to: | <input type="checkbox"/> Wind <input type="checkbox"/> Solar <input type="checkbox"/> Geothermal |
| 4. Indicators may include but not limited to: | <input type="checkbox"/> Rise of the sea level <input type="checkbox"/> Melting of ice and glaciers <input type="checkbox"/> Ozone layer depletion <input type="checkbox"/> Decrease of snow cover <input type="checkbox"/> Temperature rise <input type="checkbox"/> Change of rain pattern |
| 5. Resource efficiency mechanisms may include but not limited to: | <input type="checkbox"/> Water conservation <input type="checkbox"/> Waste management <input type="checkbox"/> Energy conservation |
| 6. Technologies may include but not limited to: | <input type="checkbox"/> Carbon florocarbons refrigerators <input type="checkbox"/> Solar lamps <input type="checkbox"/> Electric vehicles |

REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit of competency.

Required Skills

The individual needs to demonstrate the following skills:

- Monitoring and evaluation
- Creative and innovative
- ICT skills
- Problem solving skills
- Assessing skills
- Observation skills
- Resource mobilization
- Research skills
- Interpretation skills

Required knowledge

The individual needs to demonstrate knowledge of:

- Technologies
- Sustainable development
- Causes, impact and adaptation of climate change
- Local and International policies on climate change
- Indigenous knowledge of regions
- Emerging issues
- Integration of scientific perspectives

EVIDENCE GUIDE

This provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge and range.

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| 1. Critical aspects of Competency | Assessment requires evidence that the candidate: 1.1 Identified and managed effects of global warming and climate change 1.2 Identified and applied alternative sources of energy 1.3 Adapted mechanisms for resolving climate change issues |
| 2. Resource Implications | The following resources should be provided: 2.1 Access to relevant workplace or appropriately simulated environment where assessment can take place 2.2 Materials relevant to the proposed activity or tasks |
| 3. Methods of Assessment | Competency in this unit may be assessed through: 3.1 Direct Observation 3.2 Oral Questioning 3.3 Written tests |
| 4. Context of Assessment | Competency may be assessed: 4.1 On-the-job 4.2 Off-the –job 4.3 During Industrial attachment |
| 5. Guidance information for assessment | Holistic assessment with other units relevant to the industry sector, workplace and job role is recommended. |