

Compare – when a question asks you to compare something, you will need to show how two or more things are similar, ensuring that you also indicate the relevance of the consequences. Generally, you are expected to write a response one or two paragraphs long.

Contrast – when a question asks you to contrast something, you will need to show how two or more things are different, ensuring you indicate the relevance or the consequences. Generally, you are expected to write a response one or two paragraphs long.

Discuss – when a question asks you to discuss something, you are required to point out important issues or features and express some form of critical judgement. Generally, you are expected to write a response one or two paragraphs long.

Describe – when a question asks you to describe something, you should state the most noticeable qualities or features. Generally, you are expected to write a response two or three sentences long.

Evaluate – when a question asks you to evaluate something, you should put forward arguments for and against something. Generally, you are expected to write a response one or two paragraphs long.

Examine – when a question asks you to examine something, this is similar to “analyse”, where you should provide a detailed response with key points and features and provide critical analysis. Generally, you are expected to write a response one or two paragraphs long.

Explain – when a question asks you to explain something, you should make clear how or why something happened or the way it is. Generally, you are expected to write a response two or three sentences long.

Identify – when a question asks you to identify something, this means that you are asked to briefly describe the required information. Generally, you are expected to write a response two or three sentences long.

List – when a question asks you to list something, this means that you are asked to briefly state information in a list format.

Outline – when a question asks you to outline something, this means giving only the main points, Generally, you are expected to write a response a few sentences long.

Summarise – when a question asks you to summarise something, this means (like “outline”) only giving the main points. Generally, you are expected to write a response a few sentences long.

Assessment Task 1 Instructions

Provide answers to all of the questions below:

1. Assume that you are an Operations Manager for a large organisation that manages ICT projects, what best practice approaches could you take to ensure sustainability is implemented. Discuss at least four best practice approaches.
2. Outline the purpose and scope of the Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act).
3. Provide a summary of the AS/NZS 3598:2014 standards and explain what the purpose of each of these standards is.
4. Discuss Work Health & Safety (WHS) implications when developing a new Sustainability Policy and Procedures.
5. Explain how to estimate CO² emissions for a computer using the annual energy usage (kWh) and greenhouse emissions calculations (kg x kWh).
6. Explain the key steps in a policy development process.
7. Explain the main components of a policy document.
8. Outline policy development practices that may be used in response to resistance to the introduction of policies.
9. Describe the processes that should be followed when an organisation's policies are being developed.

10. Summarise how a power consumption audit is carried out.

11. Identify five tools that can be used to bring about sustainability improvements within an ICT business. These tools can be practices, systems, techniques, or procedures.

12. Explain what a Quality Management Plan is, and describe its main components

13. Explain what a payback period is, and how it can be used to determine the cost-effectiveness of ICT projects.

14. Explain how sustainability criteria having as part of a procurement policy can help ensure workplace sustainability.

Assessment Task 2: Sustainability and energy audit project

Task summary

You are required to determine how to integrate sustainability into an organisation's ICT system and collect power consumption data. You are then required to write a Sustainability Policy and Procedures for the case study organisation and implement several sustainability actions.

Finally, you are required to estimate the potential energy savings that could be generated by a proposed project.

This assessment is to be completed in the simulated work environment in the RTO.

Required

- Access to textbooks and other learning materials
- Computer with Microsoft Office and internet access
- Briefing Report Template
- Case Study
- Sustainability Policy and Procedures Template
- Energy Audit Report Template

Timing

Your assessor will advise you of the due date of these submissions.

Submit

- Email with Briefing Report attached
- Email with Sustainability Policy and Procedures attached
- Email with Energy Audit Report attached

Assessment criteria

For your performance to be deemed satisfactory in this assessment task, you must satisfactorily address all of the assessment criteria. If part of this task is not satisfactorily completed, you will be asked to complete further assessment to demonstrate competence.

Assessment Task 2 Instructions

Carefully read the following:

Document Nation is a small business that provides document consultancy and editing services. The Case Study provides further detail on the company.

As the IT Manager for the company, you are currently reviewing the company's ICT systems and projects to evaluate the potential for the integration of sustainability, both for cost effective, as well as to embrace sustainability.

Complete the following activities:

1. Write an ICT Sustainability Briefing Report.

Using the ICT Sustainability Briefing Report Template, write a report that you can present to the Managing Director, Angela Lu.

Your report should include the following:

- A review of the ICT systems of the organisation and the potential for the integration of sustainability.
- Recommendations on how sustainability can be integrated into each system
- Suitable short-term technology options for implementing sustainability and achieving the reduction of power usage.
- Recommendation on which option/s would be of greatest benefit to the organisation.

2. Send an email to the Managing Director, Angela Lu (your assessor.)

The text of the email should be in grammatically correct English, written in an appropriate (polite, business-like) style.

It should introduce and summarise the contents of the attachment and ask for an appointment to discuss it with her.

Attach your Briefing Report to the email.

- 3 **Gather power consumption data**

It has been decided that you should conduct a power consumption audit and collect power consumption data for presentation at a meeting with senior staff.

Identify a suitable tool for measuring power consumption and standards for determining whether the power consumption is reasonable or not.

You will complete this assessment in your RTO using computers provided by your assessor. Complete the power consumption measurement on the computers provided. As you do this, summarise to your assessor the method you have chosen for measuring power consumption, why you chose this method and the standard against which you are measuring power consumption.

Take notes on your findings.

4 **Meet with the Managing Director and the Operations Manager.**

Angela has responded to your email with the briefing report and would like you to meet with herself and the Operations Manager. The managers will be roleplayed by your assessor and another student.

The objective of the meeting is to present your findings as set out in your briefing report and power consumption audit and to gain their support for your recommendations.

Begin by explaining your findings and recommendations from your briefing report, as well as your power consumption audit.

Assume that the stakeholders may not necessarily be committed to the integration of sustainability, so you will need to use negotiation skills to agree on workable solutions.

During the meeting, you are required to demonstrate effective interpersonal and communication skills including:

- Speaking clearly and concisely
- Using effective non-verbal communication skills to encourage audience interest
- Responding to questions
- Asking questions to seek feedback
- Use of active listening techniques to confirm and clarify understanding.

You are also required to demonstrate negotiation skills to ensure your preferred options are approved.

You have received the following email from Angela:

Dear IT Manager

It was great to meet with you and to hear your recommendations.

We would like you to proceed with the following sustainability actions:

- Develop a sustainability policy and procedures
- Implement a hibernation plan for all computers to achieve power reduction.

Please don't hesitate to contact me if you have any questions about these.

Regards

Angela

5. Develop a sustainability policy and procedures.

The policy and procedures should include:

- Purpose
- Scope
- Key Performance Indicators (KPI)
- Responsibilities
- At least six ICT projects (in order of priority) that would foster sustainability and environmental best practice. Give an estimate of the cost of each.

- Procedures that address disposal of existing ICT equipment as it is replaced and procedures to ensure that future IT purchases take into account sustainability.

Use the Sustainability Policy and Procedures Template to guide your work

6. **Send an email to the Managing Director (your assessor.)**

The text of the email should be in grammatically correct English, written in an appropriate (polite, business-like) style.

It should introduce and summarise the contents of the attachment.

The email text should also discuss the WHS implications of the new policy and procedures.

Attach your Sustainability Policy and Procedures to the email.

7. **Implement hibernation plan on the ICT system.**

You will be required to demonstrate to your assessor that you can program the computer to:

- Go into sleep mode after five minutes of inaction and into hibernation after ten minutes of inaction.
- Use the power saver Windows Power Plan setting.

Research how each of these activities are carried out and practice them prior to the meeting.

You will be demonstrating how to do this on a computer provided by the assessor.

As you are performing the activity, tell the assessor what you are doing and why.

You now receive the following email from Angela:

Dear IT Manager

Yesterday evening I had a very interesting discussion with a colleague who suggested to me that we adopt a Virtual Desktop Infrastructure.

Our current, thick client system uses 60 watts per hour per computer.

Apparently, a zero-client system uses an average of 10 watts per hour per computer.

Take the average price of electricity in Australia as 30 cents (0.30) per kWh.

The company operates for 50 weeks in the year.

The total cost to implement that VDI solution would be \$6,000.

If I remember correctly from our recent energy audit, we have 20 staff using their computers for about 36 hours per week, 10 use theirs about 30 hours per week, and 10 about 20 hours per week.

Could you please work out what our energy usage would be if we undertake this project?

And also estimate the payback period would be if we adopt their suggestion.

Please leave the workings in your calculations so I can follow them.

I would also appreciate it if you can convert the kWh used into CO² emissions

Please write this up in a detailed report and send it to me as soon as you are finished.

Regards

Angela

8. Write an Energy Audit Report

Using the information from the case study and from internet research, write a report that includes the following:

- The company's computer energy usage currently and what it would be if the proposed ICT project is carried out.
- The potential financial savings from adopting the VDI system.
- The payback periods.
- The estimated CO² emissions be if the project is carried out, compared to the benchmark of current usage.

Use the Energy Audit Report Template to guide your work.

9. Send an email to the Managing Director (your assessor.)

The text of the email should be in grammatically correct English, written in an appropriate (polite, business-like) style.

It should introduce and summarise the contents of the attachment and seek their feedback.

Attach your Energy Audit Report to the email.