Activity 2.1 Resource Use

In the table below list the resources your workplace consumes, in the next comment write if they are renewable or non-renewable resources and lastly comment on if and how you can reduce the use of these resources.

|  |  |  |
| --- | --- | --- |
| *Resources used* | *Renewable or non-renewable* | *Ways to reduce* |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

Activity 2.2

Complete a walk around survey and list your results in the table below

This simple task requires that you walk around and really LOOK at areas of environmental impacts and inefficiency in your workplace/TAFE. Many of these areas are often caused by bad habits that are easy to spot and straightforward to fix. They can generally be broken down into four key categories:

energy

water

waste

pollution

|  |  |  |  |
| --- | --- | --- | --- |
| **Identified environmental hazard** | **Suggested improvement** | **Suggested way to monitor success of the improvement** | **Additional improvements after looking at next activity** |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

Activity 2.3 Sustainability Action Audit

2.3 Fill in the columns below after looking carefully at your workplace/TAFE.

Put a big tick in the YES column if its being done

Put a big tick in the second column if you like an idea and think it should be a part of your workplace

The third column is for your suggestions as to how a new idea might be implemented. Think about what needs to be done, equipment required etc

|  |  |  |  |
| --- | --- | --- | --- |
| **Choosing Energy Sources** | **Yes!** | **Will!** | **What do we need to do to implement this idea** |
| Use alternative energy sources such as solar, bio-ethanol and wind energy. |  |  |  |
| Use a clean fuel such as LPG or methanol. |  |  |  |
| Use fuels with the least greenhouse impact. |  |  |  |

|  |  |  |  |
| --- | --- | --- | --- |
| **Using energy and resources carefully-Lighting** | **Yes!** | **Will!** | **What do we need to do to implement this idea** |
| Switch off the office lights when no one is in the room. |  |  |  |
| Use the most efficient lights possible to save power as well as reduce air conditioning loads and reduce labour needed to change globes. |  |  |  |
| Install skylights or look at ways to maximise the use of natural daylight. |  |  |  |
| Use time switches to control the amount of time that lights are switched on. Push-button or time-delay switches will provide a pre set period of light (from 10 seconds to 30 hours) |  |  |  |
| Use sensors to automatically switch lights on or off by detecting existing light levels or the movement of people. |  |  |  |
| Use voltage reduction equipment wired into the lighting power supply to reduce the voltage applied to all lights. |  |  |  |
|  |  |  |  |

|  |  |  |  |
| --- | --- | --- | --- |
| **Energy saver functions** | **Yes!** | **Will!** | **What do we need to do to implement this idea** |
| Turn on the energy saver feature on computers and other office equipment. This will turn off your screen when you haven’t touched the computer for a while. |  |  |  |
| Use energy efficient office equipment and power saving functions where they will be most effective. |  |  |  |
| Minimise expenditure on space heating. At 20 °C, a 1 °C increase can cost about 20 per cent more. |  |  |  |
| Insulate rooms to minimise energy waste. |  |  |  |
| Fit self closing doors to reduce heat (or cold) loss from draughts. |  |  |  |
| Minimise the use of hot water as it costs much more than cold water. |  |  |  |
| Require suppliers to quote the energy consumption and costs of a new piece of equipment. |  |  |  |

|  |  |  |  |
| --- | --- | --- | --- |
| **Water consumption** | **Yes!** | **Will!** | **What do we need to do to implement this idea** |
| Don’t waste water or avoid using water wherever possible — use a dry technique such as a broom, vacuum cleaner or compressed air jet. |  |  |  |
| Fix dripping taps and leaking pipes and install water saving accessories around your workplace. |  |  |  |
| Reuse waste water if at all possible. |  |  |  |
| Where possible utilise harvested rainwater. |  |  |  |

|  |  |  |  |
| --- | --- | --- | --- |
| **Waste handling and disposal techniques** | **Yes!** | **Will!** | **What do we need to do to implement this idea** |
| Make sure you know where every type of waste should go. |  |  |  |
| Dispose of materials using a reputable and correctly licensed contractor. |  |  |  |
| Clearly label recycling and waste bins. Use colour coding and/or pictures to indicate what each bin’s purpose is. This can be extremely important in a workplace where English is not everyone’s first language. |  |  |  |

|  |  |  |  |
| --- | --- | --- | --- |
| **Chemical use and storage of chemicals** | **Yes!** | **Will!** | **What do we need to do to implement this idea** |
| Substitute toxic materials with non-toxic materials where possible. |  |  |  |
| Have a material safety data sheet (MSDS) for all chemicals to ensure appropriate skills and capacity to store and use the product properly. Keep a list of all chemicals stored. |  |  |  |
| Ensure lighting is adequate to avoid accumulation of mess and to allow fault detection |  |  |  |
| Store materials where a spill cannot contaminate the soil and ensure that materials in storage cannot collect, contaminate or mix with rainwater |  |  |  |
| Store liquids indoors or undercover, on a sealed surface and within a bunded area. |  |  |  |
| Store oils and chemicals in original closed containers. |  |  |  |
| Ensure chemicals cannot react with others stored nearby. For example, acids should not be stored beside alkalis as they can react together violently. |  |  |  |
| Include planning for fire and other emergencies when planning storage locations. |  |  |  |
| Ensure storage tanks, including those underground, are not leaking. |  |  |  |

|  |  |  |  |
| --- | --- | --- | --- |
| **Protect the waterways/ control washing and spills** | **Yes!** | **Will!** | **What do we need to do to implement this idea** |
| Ensure that all stormwater drains and sewer entry points are correctly and clearly marked. |  |  |  |
| Fit litter traps onto stormwater inlets to stop rubbish going to the local water systems. |  |  |  |
| Prevent sediment from construction sites entering stormwater drains by using straw bales or fabric filters. |  |  |  |
| Prevent contamination of rainwater by roofing over areas where spills can occur. |  |  |  |
| Avoid washing equipment, transferring chemicals, opening liquid containers and filling tanks where spillage could flow to a creek or stormwater drain. |  |  |  |
| Keep large exterior work areas clean to significantly improve water quality. |  |  |  |
| Never tip oils, paints, solvents or any pollutant onto the ground or down a drain. Ensure workers can quickly and effectively block stormwater drains in an emergency. |  |  |  |
| Be prepared for spills and respond to them immediately (do not hose them away). |  |  |  |
| Keep a spill kit on site for cleaning up any spills. |  |  |  |

|  |  |  |  |
| --- | --- | --- | --- |
| **Reducing odour and air emissions** | **Yes!** | **Will!** | **What do we need to do to implement this idea** |
| When working with solvents and odorous materials, use a fume hood or spray booth to reduce the vapours leaving the area. |  |  |  |
| Use low odour products and materials. |  |  |  |
| Minimise the quantities of solvents and other volatile materials used. |  |  |  |

Activity 2.4 Waste Audit

Waste recording sheet

It is suggested to use a separate form for each bin/skip

Site: ……………………… Date: …………..

Bin use: □ waste □ paper recycling □ bottles & cans recycling □ commingled

Bin/skip No. ……………………………

Bin/skip Capacity: …………………… litres/m3

Collection Frequency: ……………………

Annual waste/ recycling cost: ………………………………………

| Waste type | % of bin | Quantity  specify litres or kg - estimate | Estimated volume/weight per annum |
| --- | --- | --- | --- |
| Office Paper – single sided |  |  |  |
| Office Paper – double sided |  |  |  |
| Newspapers and magazines |  |  |  |
| Other paper products (eg. paper towels, glossy paper) |  |  |  |
| Cardboard |  |  |  |
| PET plastic (#1) - soft clear plastic (ie.bottles/containers) |  |  |  |
| HDPE plastic (#2) - cloudy plastic (eg. milk bottles) |  |  |  |
| Polyvinyl (#3) – tough clear plastic (eg. cordial bottles) |  |  |  |
| Plastic film - non-recyclable (eg. plastic food wrapping, cups, packaging) |  |  |  |
| Aluminium cans |  |  |  |
| Steel cans |  |  |  |
| Glass – bottles & jars |  |  |  |
| Food scraps |  |  |  |
| Toner cartridges |  |  |  |
| Electronic equipment |  |  |  |
| Office refit ie. old carpet |  |  |  |
| General waste (list) |  |  |  |
| Contamination (list) |  |  |  |

Comments:

Activity 2.5 Greenwash

Research Apple or Coke or any big name, can you find evidence of greenwash?