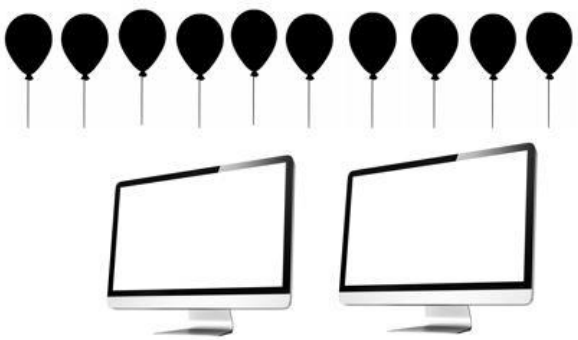
Business Sustainability Modules

Visualisation – Black balloons or pot plants to show impact of carbon missions

Visualising the impact of not turning off monitors



- It may not seem like much when monitors only consume 2 Watts (W) every hour on standby. However, if 2 monitors are left on standby after work hours for a week, it accumulates to 512W of power consumed.
- That's 716gCO_{2e-} (carbon emissions) which can be visualised to staff with 14 black balloons.
- Times this by 52 weeks a year and 10 workspaces (372 320g CO_{2e-}) and that's 7446 balloons or close to 0.4 tonnes!

Visualising offsetting carbon emissions

- Using a carbon equivalent calculator, it will take 3 tree seedlings grown for 10 years to recover that carbon (266, 240W per year)!

The maths!

- Each workstation has 2 monitors
- 50 g CO_{2e-} held in each balloon [1]
- 1400g CO_{2e-} by using 1000 W for 1 hour [1]
- 100 000 W can be sequestered by 1.2 tree seedlings grown for 10 years [2]

2 x monitors in standby mode = (2 x 2W/hr x 16hrs x 5days) + (2 x 2W/hr x 24 hr x 2 days)
= 512 W/week or 716 g CO_{2e-} /week or 14 balloons/week

For 10 workstations /yr = 10 workstations x 52 weeks per year x 512 W/ week
= 266,240 W / yr or 3 tree seedlings

Remember: Use biodegradable balloons or preferably pot plants

1. Environment Protection Authority Victoria 2011, Australian Greenhouse Gas Calculator - Black Balloons Calculator
2. www.epa.gov/energy/greenhouse-gas-equivalencies-calculator