

Written sustainability report

BSBSUS401 Implement and monitor
environmentally sustainable work practices

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Introduction

My group is spending four weeks looking at the power meter of a water fountain at the start and end of the day. Our goal for the first two weeks is to find out how much energy we when it is in use and for the second fortnight our goal is to see how much energy is used when it is not in use. The project is being undertaken because we want to see if there is a differentiation between power usages.

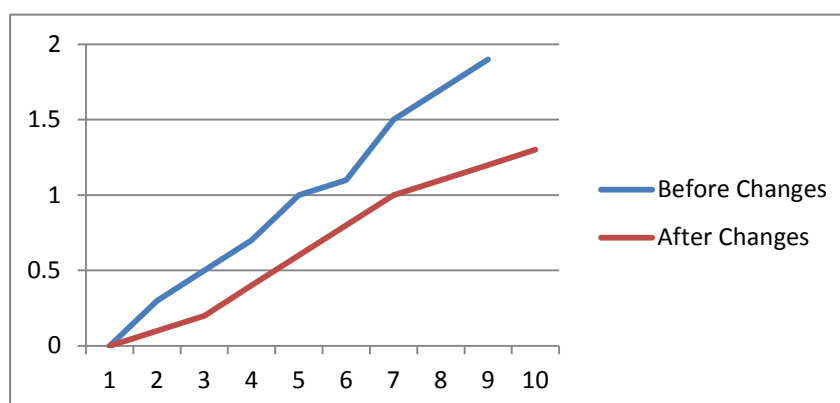
Expectation v. Reality:

After the first fortnight we discussed and implemented changes for the second fortnight. For our change we decided that we would record the power usage when the fountain is not in use so that we could compare it to the first fortnight to see the difference between power consumption. We expected change but not a drastic one and on the last day it ended up being almost half. At the end of the first fortnight where we ran the fountain the KWH was 2.1 and at the end of the second fortnight where we didn't run the fountain the KWH was 1.3.

There are many ways that affect the cost to the college and environment these may include the following:

- Replacing the drinking fountain with an even more cost effective, power saving and water saving fountain so that in the long run, we save money and water
- Encourage people to bring in their own water bottles that can be used over and over and refilled at water fountains to save the environment from litter.

Before and After Changes of KWH:



Other Sustainable Ideas:

- Rainwater Tank

We can improve on this as there are only a few rainwater tanks on campus and in Albany it rains, a lot. If we install more rainwater tanks we can use it for all our requirements as the amount of rainwater we have currently supplies almost all of our requirements. If we do this

we no longer have to pay for using scheme water and once again, in the long run, we save a lot of money.

- **Bike Racks**

Bike racks are a great idea, as the college states, "Cycling has the potential to significantly reduce road congestion, oil use and air/water pollution." This statement is true but is not really effective as not everybody owns a bike and would rather take the bus in. We can improve this by having a bike lockup where bikes can be rented, these sorts of bikes have an exact design and trackers so that the community know they are owned by the college and are easy to find if stolen.



- **Rubbish Recycling Area**

Recycling is extremely important in today's society but people are still extremely lazy when it comes to recycling. To improve on this we must stress the importance on recycling, make sure there is a bin in every area where rubbish may be and in worse case scenarios, punishments for people that are too lazy to take 4/5 steps to a bin.

- **Photovoltaic Cells**

We can improve on solar panels by getting them (gradually) on all the buildings on campus, especially the areas that use a lot of energy on a daily basis such as D block.

- **Nursery**

The nursery is a great place to look at flora that you don't see often anywhere else. It can be improved by leaving it how it is but planting those plants all around the campus so that they can be looked at and won't be walked through.

Conclusion

Results:

After changing how we measured the fountains power consumption, it was clear to see that what Kieran, Cody and I had come up with had worked and saved almost half of what was being used before. The results can be changed for the better by the college purchasing a new water fountain that has a higher rating and will save money in the long run.

How the Water Corp Saves

<https://www.watercorporation.com.au/about-us/environment-and-sustainability>

What Recycling Water Does

<http://www.water.wa.gov.au/urban-water/water-recycling-efficiencies/overview-of-water-recycling>