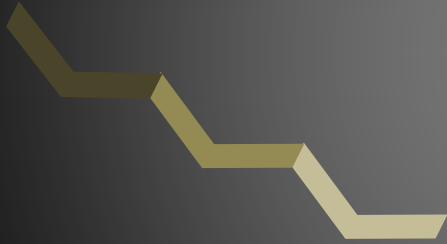


Sustainability Report



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8/23/2016

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Introduction

This short report is all about Sustainability. What sustainability means it is that of maintaining or keeping track of something. We do this for the environment so we don't run out of resources, pollute the planet or make species become extinct.

Waterwise Gardens

This garden has been improved with waterwise plants. This means less water is being used for the plants; they don't need as much maintenance and are adapted to our climate. Verge lawns are common on the campus yet not all are being utilised even though we are using so many resources on them. The better option is using low-water-use and low-maintenance plants.

Vegetated Swale

Vegetated swales filterate stormwater runoff as it moves downstream it is also designed to capture it. It can be a visual feature as well. This system is better for the environment for filtering pollutants from stormwater.

Rubbish Recycling Area

Recycling is a process that converts used items for new products. We are using less machinery to mine raw minerals with this method. It uses less energy than getting new raw materials, creating less greenhouse gas emission. This is way of protecting the environment.

Rainwater Tank

Rainwater is easy to get your hands on because it's a natural resource for free. We don't have to rely on water from mains especially being in Albany in winter

Grass Tree

Xanthorrhoea (also known as the grass tree) is an Australian plant, it is a perfect example of how tough the Australian landscape can be. It can survive throughout drought it also can grow back after a bushfire and even have flower growth. Some plants are even estimated to be 100 years and older.

Photovoltaic Cells

A group of solar cells that face north on top of a roof. 24 panels have the power to generate about 6kW of electricity.

Panels collect sunlight rays and convert it to electricity. This is environmentally safe because it reduces the need to use fossil fuels to power. It constantly gets more and more efficient and updated.

External Aquaculture Area

There are many trials and initiatives created to have an environmental impact minimal. Aquaponics systems use waste from trouts to grow vegetables. Wind turbines are used to generate power for the native system. We make gardens that utilise nutrient-rich waste water.

Wind Turbine

Wind energy gets converted to electricity. Used to power pumps in the external aquaculture tanks. The Tower creates wind and solar energy (solar film is wrapped around the tower). It can operate day and night in windy areas, better for the environment, cheaper to generate power.

Production Horticulture

These gardens are more cost-ineffective since they use rain water and ground water. Produce grown here reduces food miles.

Nursery

Nursery Students breed endangered species native to Australia for conserving and revegetating the planet. All soil and pots are recycled through a sterilisation process. We use rain water instead of scheme water because it reduces costs.

Settling Pond

Settling ponds are used to settle the iron out of ground water. Less scheme water is used in the process of doing this.

Bike Racks

Cycling is good for the environment because reduces oil use, water pollution and greenhouse gas. Cycling also gives health benefits to the person by reducing heart disease and the risk of stroke. It's a way of travelling without affecting the environment.

Aquaculture Grow Out Area

Aquaculture grow out area uses Recirculating Aquacultures Systems to grow rainbow trout from the eggs to fully grown fish in a short time period. They use recirculating systems to use scheme water as little as possible, fish waste grows garden plants and waste water is at minimum recirculated water pumps and tanks.

Sensor Lights

Cheap and effective device that are easy to install mostly installed on a wall or ceiling. It highly energy efficient meaning they are really low maintenance costs. Sometimes energy saving for this item can be up to 75%, but it usually averages around 35% to 45%.

Conclusion

I think that people should have solar panels. They're efficient and cheaper than normal electricity bills. It is also safer for the environment because it doesn't use fossil fuels. This would cut down the amount of fossil fuel and money used each year in households.

Hyperlink References

- 1 – Waterwise Gardens
<http://www.gsit.wa.edu.au/waterwise-gardens>
- 2 – Rubbish Recycling Area
<http://www.gsit.wa.edu.au/rubbish-recycling-area>
- 3 – Rainwater Tank
<http://www.gsit.wa.edu.au/rainwater-tank>
- 4 – Vegetated Swale
<http://www.gsit.wa.edu.au/vegetated-swale>
- 5 – Sensor Lights
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- 6 – Bicycle Racks
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- 7 – Grass Tree
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- 8 – Photovoltaic Cells
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- 9 – External Aquaculture Area
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- 11 – Aquaculture Grow-Out Area
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- 12 – Production Horticulture
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- 13 – Nursery
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- 14 – Settling Pond

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