

# Environmental Sustainability Pack

for Sport and Recreation Organisations

in Western Australia

February 2012



Government of Western Australia
Department of Sport and Recreation

# Acknowledgements

This document was developed by Greensense Pty Ltd on behalf of the Western Australian Department of Sport and Recreation.

www.greensense.com.au

## Disclaimer

This resource contains comments of a general nature only and is not intended to be relied upon as a substitute for professional advice. No responsibility will be accepted by the Department of Sport and Recreation for loss occasioned to any person doing anything as a result of any material in this resource.

## Enquiries

Philip Badock

Team Leader State-Wide Programs and Innovation

Department of Sport and Recreation

PO Box 329, Leederville WA 6903

or

info@dsr.wa.gov.au

www.dsr.wa.gov.au

ISBN 978-1-921648-30-4



This document is printed on ecoStar paper which is an environmentally responsible paper made carbon neutral (CN) and the fibre source has been independently certified by the Forest Stewardship Council (FSC).

www.eccm.uk.com

www.carbonneutral.com

# Contents

Fc	preword	1
Pr	reface	1
	Purpose of this document	1
	Structure of this document	1
	How to use this document	1
Pa	art 1 – Introduction	2
	Environmental sustainability and sport	2
	The benefits of sustainable sport	2
	What are the current issues?	3
	Climate change	3
	Energy efficiency	4
	Waste	4
	Water	5
	Biodiversity	5

Part 2 – What can you do?	6
Commit	6
Plan	6
Do	7
Review	7
Action planning	8
Energy efficiency	8
Waste	10
Water	12
Biodiversity	13
Want to do more?	14
Part 3 – Additional tools and resources	18
Sample documents	18
A pledge for sustainability	18
A sustainability policy	18
A sustainable procurement policy	19
Action plan template	19
More information_	20
Department of Sport and Recreation documents	20
Other resources	20
Reference list	22



## **Foreword**

Western Australians love their sport and recreation and getting outdoors to experience the diverse natural environments our state has to offer. Our enjoyment of these environments, however, does not come without its share of challenges.

Issues such as climate change, sustainability and natural resource management will continue to put pressure on the sport and recreation industry into the future. These issues have been identified in Strategic Directions for the Western Australian Sport and Recreation Industry 2011–2015 (SD5), which pays particular attention to sustainable organisational development, open spaces and natural environments.

Our communities are increasingly looking beyond businesses and governments towards other bodies to show innovation and responsibility in responding to these environmental challenges.

The very nature of sport and recreation and its use of natural and built spaces means our industry has an inherent duty to respond to these challenges. The good news is that the passion that exists for sport and recreation in the Western Australian community sees our industry ideally placed to respond to these challenges.

It is my hope that the tools and resources in this pack will assist WA sport and recreation organisations to understand their environmental impact, put processes in place to reduce it and ultimately ensure that sport and recreation is equipped to thrive into the future.

Hon Terry Waldron MLA **Minister for Sport and Recreation** 

## Preface

## Purpose of this document

While the sporting organisation's primary goal is to develop and grow their sport, high performing organisations are also aware of economic, social and environmental factors that impact on their responsibilities to the community.

The purpose of this document is to provide information on environmental issues currently facing sporting organisations and clubs within Western Australia and to equip them with the tools and skills necessary to reduce their environmental impact.

The intended audience for this document is made up of sporting clubs and organisations through to the owners or managers of sporting facilities and complexes. Despite this, the concepts covered and tools provided will be relevant to a broad range of organisations, and as such can still be used as a reference tool by organisations of many types and sizes, sporting or otherwise. For the purposes of this document, these groups will generically be referred to as an 'organisation'.

## Structure of this document

This document is split into three sections to assist organisations in understanding why they should address environmental sustainability, how to do so and how to find additional help.

Part 1 provides an introduction to the environmental issues facing organisations today and explains why addressing these issues can be in their best interest.

Part 2 introduces actions that organisations can take to reduce their environmental impact. These actions are listed by ease and cost to implement, enabling organisations to initiate quick wins and low cost improvements first before assessing and planning more costly solutions where possible.

Part 3 provides additional tools and resources to assist organisations with implementing the actions and concepts covered in this pack, as well as how they can do more if desired.

#### How to use this document

You should use this document to help your organisation improve its environmental sustainability. Use Part 1 to familiarise yourself with the current issues affecting sport and the environment. Use Part 2 to understand what you can do and to develop your own specific action plan. If you decide you would like to do more, you can bulk up your action plan with other options provided in Part 3.

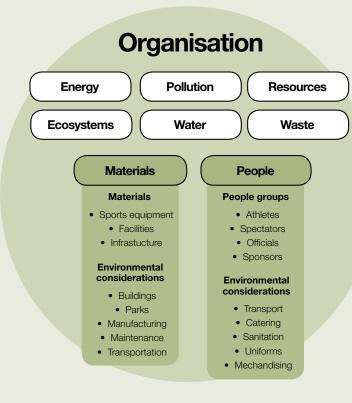
## Part 1 – Introduction

Environmental sustainability is all about trying to maintain a minimum quality of life without adversely impacting on the environment or reducing our future generations' ability to meet their own needs to live, work and play with the same quality of life we currently experience.

# Environmental sustainability and sport

Sport is a large part of the Australian lifestyle. All sports use natural resources to some extent and have an impact on our natural environment. Sports by their very nature bring people together; athletes, spectators, officials, sponsors and suppliers come together to participate in and support sport. Furthermore, sport has requirements that impact on the environment such as equipment, facilities, infrastructure, transportation, catering, sanitation and merchandising.

When we consider the people and materials involved in sport, it becomes clear that all sorts of resources from energy, water and other consumables are required to enable sports. Inevitably, sport leads to the generation of waste and pollution which impacts on our ecosystems. Environmental sustainability in sport is all about managing these interactions to minimise the negative impacts and maximise the positive.



## The benefits of sustainable sport

The benefits of bringing environmental sustainability into your organisation go beyond 'doing the right thing' by the environment. It is common for sustainability actions to lead to cost savings. For example, finding ways to reduce your fuel, water and electricity use will lead to a reduction in your costs. When you consider that we are expecting to see increasing costs for most of our resources over the coming years, finding ways to reduce these costs now is of much benefit. You may also find that the added recognition and reputation benefits you receive from 'going green' may lead to increased sponsorship and other funding opportunities for your organisation.

"Whenever a person engages in sport there is an impact on the environment."

**UN Sports and Environment Program** 

## What are the current issues?

## Climate change

Climate change, often called 'global warming', refers to changing weather patterns and climates around the globe, and has been attributed to an increase in human-generated greenhouse gases. These gases are created when we do things such as burn fuel, consume electricity and dispose of waste in landfill.

#### Climate change in WA

It is predicted that in Western Australia our climate will change significantly in the coming 30 years. It is anticipated that:

- WA will be hotter, particularly the inland regions, which may see a temperature increase of up to two degrees Celsius.
- WA will be drier, with less rainfall, particularly in the south-west region.
- WA will experience more intense droughts, heat waves and storms.
- WA will experience more intense storms, floods, rainfall events and tropical cyclones.
- Sea levels will rise (CSIRO, 2007).

### How do we respond to climate change?

Part of the response is to change our behaviour to best deal with the affects of climate change, which we are already beginning to see. This is known as adaptation and includes examples such as replacing grass with artificial turf to reduce the need to water it, or building shade structures next to buildings to protect them and their occupants from increasing temperatures.

The other half of the response to climate change is what we call mitigation. Here, we do what we can to prevent or reduce the release of greenhouse gases into the atmosphere and hopefully reduce the level of climate change we will experience in the future. Examples of mitigation include installing solar panels to produce clean energy and increasing our recycling to reduce the amount of waste going to landfill.

#### Relevance to sport and recreation

As climate change continues to affect our environment, we can expect it to impact on sport and recreation in a variety of ways. Increased temperatures and reduced rainfall will reduce the quality of playing surfaces; increased evaporation will require more water for both irrigation and open water facilities; and sporting facilities and infrastructure may be at increased risk from storm damage and flooding.

## Carbon neutrality

Carbon neutrality is the process of measuring your carbon emissions and offsetting them so that you have net zero emissions. While achieving carbon neutrality is to be commended, there are a number of risks and pitfalls that organisations considering going carbon neutral should consider. More information on the process of achieving carbon neutrality and what to be aware of when making public claims of carbon neutrality can be found in Part 3.



## Energy efficiency

Energy efficiency goes hand in hand with climate change, as it is generally the burning of fossil fuels that leads to the release of greenhouse gases into the atmosphere. Energy accounts for over 70% of Australia's carbon emissions (Department of Climate Change and Energy Efficiency, 2010). As such effective energy management is critical to developing a sustainable sporting organisation.

Energy not only refers to the use of electricity but also fuel, such as diesel, petrol or gas. However, the big issue with electricity is that its use is invisible for most of us. Unlike water and fuel, we can't see it and don't really understand it. We often don't understand how and where we use it and therefore we struggle to value and manage our use of it.

#### Relevance to sport and recreation

The cost of electricity and fuel is rising and will place increased pressure on budgets for sporting facilities and activities, leaving less money available for other purposes, such as upgrading equipment and supplies. By improving energy efficiency organisations can not only reduce their greenhouse gas emissions but also reduce their spend on energy, making more funding available for more desirable purchases.

#### Waste

Over time it has become second nature to throw away things we no longer want or need. As we continue to grow as a population and our consumption of 'things' increases, the amount we are throwing away is also rising. This is not only inefficient (in that we are not making the most of some resources by reusing and recycling them) but also takes up valuable space in landfills, which have their own environmental costs.

On a per capita basis, Western Australians generate the most waste at nearly 2500 kg per person, per year with the lowest recycling rate in the country. Furthermore, we often see litter lying around facilities after sporting events where athletes and spectators have either not put their rubbish in the right place or bins and infrastructure to collect the rubbish are insufficient for the needs. Effective waste management needs to be put in place.

#### Relevance to sport and recreation

Waste is relevant to all facets of our lives including sport and recreation. As people come together to play sport waste is inevitably generated, which requires collection and disposal. Litter can also have a detrimental affect on the look and feel of a sports facility. By addressing waste we reduce the negative environmental impacts and improve the look and feel of our sporting facilities.

#### Per capita waste generation by state



Source: Environmental Protection and Heritage Council (EPHC) National Waste Overview 2009.

#### Water

Western Australia's water predominantly comes from a mix of surface water, ground water and desalination plants. While water is an essential part of life, our increasing population and reduced rainfall is placing pressure on this once abundant resource, requiring us all to re-think how we use our water and to minimise any wastage.

Rainfall in WA is highly variable from year to year and can range from as low as 200mm per annum in the centre of the state to more that 1600mm per annum in the extreme north and south (Bureau of Meteorology, 2011). However, predicted lower rainfalls in the south-west of the state and an increasing population means we can no longer solely rely on traditional water supplies to meet demand. We all need to do our bit to improve our water efficiency and consider alternative water sources.

#### Relevance to sport and recreation

Increased water scarcity is likely to lead to increased costs for water and potentially less water being available for irrigation or water-based sporting facilities, such as swimming pools and artificial lakes. By managing water consumption, sporting organisations can work towards not only reducing their costs but also ensuring there is enough water available for all needs into the future.

## Biodiversity

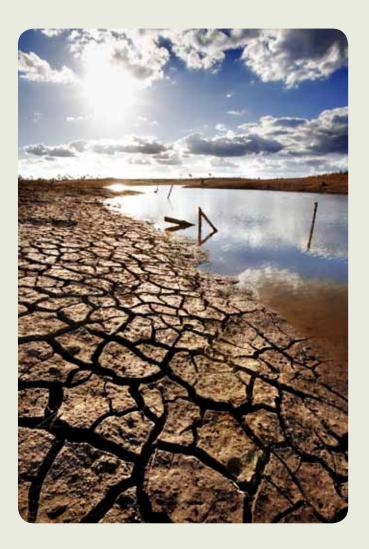
Biodiversity is the sum total of the living resources on Earth and is important for many reasons:

- It provides us with natural products including food, medicines and timber.
- Ecosystems underpin many of our natural resources and provide services such as clean water, healthy soil and pollination of crops.
- Many people find enjoyment from the range of activities they undertake in the natural environment.

WA is one of the most biologically diverse regions in the world. The south-west of WA is one of the world's 34 internationally recognised hotspots for biodiversity and the only one recognised in Australia (Conservation International, n.d.). Our biodiversity is a resource we should aim to protect and conserve.

#### Relevance to sport and recreation

Many of our sporting and recreational activities take place in outdoor environments amongst the natural environment, made possible by our range of biodiversity. To continue to participate and enjoy the outdoor sporting lifestyle, it is important to maintain our biodiversity to ensure it plays its part in maintaining the environment to the standard that we have come to expect.



# Part 2 – What can you do?

The process of improving your organisation's sustainability involves four-steps:

**Commit** – Make a visible committment to sustainability within your organisation

**Plan** – Assess what actions are available to you and develop an action plan

**Do** – Work towards implementing the actions listed on your action plan

Review – Check your progress regularly to ensure you are on track and respond as necessary

#### Commit

Before you begin the environmental sustainability journey, you should make a commitment to sustainability within your organisation. This will ensure all stakeholders are aware of what you are trying to achieve and can help you get there.

Your commitment to sustainability can be a broad vision or mission statement, a pledge or a more detailed strategy or policy. It can be an internal document only or can be made publicly available. For maximum impact, you may be interested in making a media release regarding your commitment.

Consider developing a 'Green Committee' or creating a new role for a Green Rep on an existing committee to ensure that environmental considerations are included in the ongoing management of your organisation.

If you choose to develop a sustainability policy, you should include:

- A discussion of your commitment to sustainability.
- A statement of your goals or objectives.
- A discussion of the key areas such as climate change, energy, waste, water and biodiversity and their relevance to your organisation.

An example pledge and sustainability policy have been provided in 'Part 3 – Additional Tools and Resources'.

#### Plan

Once you have made your commitment, start planning what activities you can do to improve your sustainability profile and reduce your environmental footprint.

To help you with planning these activities a list of options have been provided on the following pages. When you have decided what actions you want to implement, you should document these in your action plan.

Your action plan is the list of all activities you want to implement to improve your sustainability. It provides details of how you will undertake your activities, who will be responsible for doing it and when it should be done by. An action plan template has been provided in 'Part 3 – Additional Tools and Resources'.

Don't forget to plan how you will report on your progress. Reporting is an important part of sharing the sustainability message and you should give consideration to how you would like to share the outcomes of your journey with your broader stakeholders. Give consideration to how you promoted your commitment to sustainability and ensure that the same stakeholders are kept informed of your progress and achievements. Some options to consider are updates in regular newsletters, incorporating an environmental section in your annual report or briefing stakeholders at key events such as award ceremonies.

#### Do

When it comes to improving environmental sustainability, there are a vast number of things you may choose to do. They can vary in ease to implement and the time and money required to do so. To assist with your planning, a list of options has been provided for the key themes. They have been broken down into three categories:

Do it now: An action that is free or cheap that can be done now (typically revolves around behavioural change).

Do it soon: May require some minimal investment or change to process/infrastructure but will result in an environmental benefit.

Do it later: May require further research and more significant investment but has the potential for greater returns.

## Review

Once you have started implementing your action plan, you should review it regularly to check your progress. If you assigned a Green Rep or Green Committee during Step 1, ensure they schedule regular reviews to check the status of the action plan. Consider monthly checks for the 'do it now' items with longer checks on 'do it soon' and 'do it later' options.

Remember, you not only want to check that you have done what you said you would but that the change is also doing what you hoped it would (e.g. if you were going to install dual flush toilets check your water bills to ensure there is a reduction in how much water you are using).

Much of the sustainability journey revolves around the concept of continuous improvement. As you review your performance and have realised some of the goals you hoped to achieve, you should also give consideration to what the next step is. While you may start the journey with small actions, you should supplement these incrementally to ensure your organisation is continuously improving its sustainability.



## Action planning

## Energy efficiency

There are two major ways of improving energy efficiency:

- 1.Behavioural change: This is about finding ways to engage with your stakeholders to motivate them to change their behaviour and consume less energy. Examples include wearing appropriate clothing to your club and turning off computers and lights when not in use.
- 1.Investing in new infrastructure: This requires a financial outlay where appliances, building and facility infrastructure is upgraded to operate in a more efficient way, or investment into renewable energy sources is made. Examples include upgrades to more modern air-conditioning/heating units, or installing solar panels.

#### **Energy efficiency - Do it now**

- Undertake a behavioural change campaign to encourage people to use appliances and energy only when required. This can be done by using signs and labels to encourage people to switch off appliances not in use.
- Encourage people to walk or ride rather than take the car.
- Encourage your members and other stakeholders to car pool to sporting events and activities as much as possible to reduce fuel consumption and greenhouse gas emissions.
- If you have rosters, give consideration to car pooling opportunities when allocating shifts on the roster.
- Leverage natural lighting by giving consideration to office and desk locations, window coverings and sunlight. This can reduce the need for artificial lighting and heating.
- Replace lighting fixtures with more energy efficient options. This may be as simple as installing a more efficient light bulb, such as a Compact Fluorescent Light bulb (CFL) or LED.
- Leverage natural heating and cooling properties of the environment as much as possible before turning on air conditioning or heating. The use of removable shade structures can help to keep a building cool in summer and can be removed to maximise sunlight and warmth in winter.
- Review the efficiency of appliances such as fridges and heaters. Old appliances often require much more electricity to run than their newer counterparts and payback periods can be relatively short.

#### **Energy efficiency – Do it soon**

- Install insulation to reduce the need for heating and cooling.
- When purchasing new appliances and office equipment, purchase products that rate highly in terms of energy efficiency. Ensure that it is Energy Star compliant and purchase a product with as many stars as possible on the Energy Label rating system.
- Consider purchasing green energy from your energy supplier. This will ensure the amount of energy used is sourced from a renewable energy provider.
- Conduct an energy audit to understand where and when your electricity is being used.
- Consider purchasing Carbon Offsets to offset a portion or all of your greenhouse gas emissions.

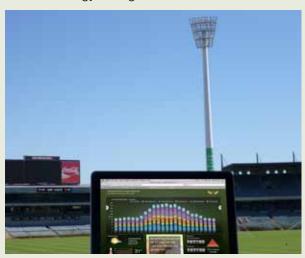
#### **Energy efficiency - Do it later**

- The installation of a real-time energy monitoring dashboard can result in increased awareness of energy usage patterns, leading to changing behaviours. Dashboards can also be used to identify appliances not running efficiently which should be replaced.
- Convert electric hot water systems to solar or gas-heated systems or give consideration to heat pumps. This can be planned to make the change when the heaters reach the end of their life. Each organisation will have different requirements and environmental factors that will affect the efficiency and effectiveness of each solution. For this reason, ensure you give consideration to the heating solution that best suits your needs and budget.
- The installation of solar panels can provide clean, green energy and has the potential to make money should excess power be exported to the grid.

## WA Football Commission case study

The Western Australian Football Commission (WAFC) is responsible for the management of Patersons Stadium in Subiaco.

With no ability to on-bill electricity charges to tenants, the WAFC needed to find alternative ways to improve energy efficiency. The commission installed real-time energy monitoring to help engage their staff, identify energy saving opportunities and improve sustainability. Within six months of installing energy monitoring, 5–10% worth of energy savings had been identified.



## Football West case study

Football West developed its 'Black, Gold and Green' program to raise awareness of environmental issues at community football clubs in WA. The program concentrates on three core components of a typical football club: 1) energy usage for heating showers, lighting training pitches and general club operations; 2) irrigation and chemical use to maintain grass pitches; and 3) recycling and waste management on event days.

The program was heavily sponsored and supported by a local solar provider, MySolar, which installed a large

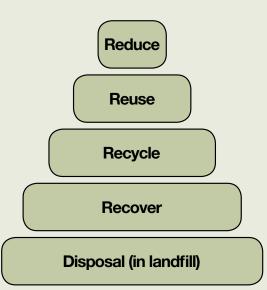
array of solar panels on the grandstand at Macedonia Park in Stirling. The system is expected to produce 20-25% of the energy required for the park, thus reducing energy bills and improving sustainability. From a greenhouse gas perspective, it will remove more than 14 tonnes of carbon dioxide from the atmosphere each year - the equivalent to taking four cars off the road.



#### Waste

When trying to manage our waste, the waste management hierarchy is a well-used model which shows the order of preference of different waste management strategies, reminding those who generate or manage waste that:

- strategies which try to avoid products becoming waste are generally preferable to ...
- strategies which seek to find a use for waste, which are in turn generally preferable to ...
- strategies for disposal, which should be used as a last resort (Wastenet, n.d.).



#### Waste - Do it now

- Contact your local council to understand what recycling opportunities exist in your local community.
- Conduct a waste audit to see what type of waste is being created and if it is being placed in the right bins.
- Establish an education campaign to raise your members' and supporters' awareness of how they should be disposing of their waste when at your facilities. This may include educating people on what materials can be reused and which ones should be disposed of via the recycling bin.
- Replace single-use products such as sauce or sugar sachets with bulk options.
- Encourage stakeholders to bring refillable water bottles rather than purchase multiple bottles of water.

#### Waste - Do it soon

- Consider installing a worm farm or compost bins to take organic products out of the waste stream and create compost. Compost can be used to add beneficial nutrients back into the soil and gardens at clubs and can also help soil to retain water. Getting club members involved with managing a worm farm can help to raise members' awareness of environmental issues in a fun and interactive manner.
- Develop a recycling program for high volume and valuable waste such as aluminium cans.
   Aluminium can recycling is extremely beneficial for the environment and if you take them to a depot or scrap metal merchant rather than put them in a bin you can make money from the process too.
- If your organisation does not use your council's curbside waste collection, then review your current waste management practices and supplier.
   Research to see if you can source another waste manager with more recycling options available.

#### Waste - Do it later

- Develop a waste program that encourages members of your organisation to bring in waste that cannot be recycled in your regular bin collection, such as electronic waste, and arrange for them to be recycled appropriately.
- Develop a sustainable procurement policy to give preference to purchasing items with minimal packaging, which will reduce the amount of waste you create.



## Triathlon WA case study

Triathlon Western Australia (TWA) wanted to improve sustainability within the sport and selected Ironman 70.3 Busselton to showcase sustainable sports management practices. A particular focus was on waste management. In the first year as a sustainable event, TWA identified a local waste management company who were able to provide bins to separate waste into different categories

for recycling and to ensure that the separated waste was processed appropriately.

The next year, TWA further developed this partnership by inviting the waste manager to sponsor the event, further assisting them in achieving their waste management and sustainability goals.



#### Water

Improving water efficiency can be achieved by finding ways of using less water to achieve the same outcomes or to find alternative sources of water to reduce the demand on scheme supplies.

#### Water - Do it now

- Conduct a water audit. Guidance on how to complete this can be found on the Water Corporation's website (www.watercorporation.com.au/\_files/waterwise/ ww\_business/WBI\_Conducting\_a\_water\_audit.pdf). You can use this information to identify high water use areas to target your other water saving activities.
- Develop a water education and awareness campaign to encourage staff and club members to use water wisely.
- Install flow regulators on all taps to reduce the rate of water released.
- Identify and repair any leaks.
- Ensure a regular monitoring regime is in place to check for leaks in the future.
- Only backwash pool pumps for the minimum amount of time required and no more frequently than advised by the manufacturer.

#### Water - Do it soon

- Ensure that water efficient showerheads are installed.
   This can be achieved by comparing models using the number of stars on a showerhead's Water Rating Label.
- Install spring-loaded taps to ensure that taps cannot be left on.
- Examine your cleaning practices is water being wasted unnecessarily? If so, change them.
- Ensure pool pumps are serviced regularly so they are running at their optimum efficiency and require less backwashing. This will also help with energy consumption.



#### Water - Do it later

- Install water efficient toilets and waterless urinals.
- Harvest rainwater from club rooves to reduce the amount of water taken from dams. Collected water can be plumbed into the toilet system to avoid the use of scheme water for flushing toilets.
- Install grey water systems and use the recycled water for reticulation.

## Biodiversity

Managing our biodiversity is about taking a positive attitude to the management of our natural resources and their conservation.

#### Biodiversity - Do it now

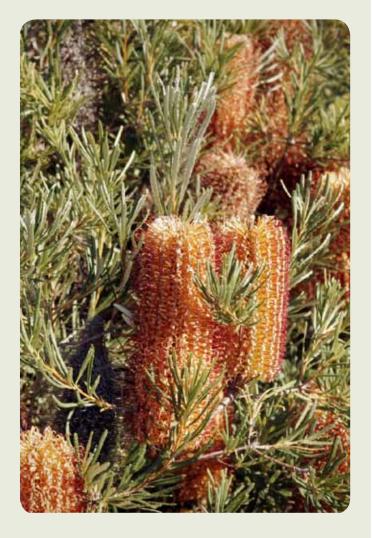
- Get in touch with your local council and find out if there are any particular biodiversity issues you should be aware of in your area.
- Have a busy bee day to tidy up garden beds and remove weeds and other invasive species.
- Encourage people to dispose of waste appropriately as litter can pose a threat to much of our native wildlife.
- Ensure gardens are of local plant species and are tolerant to the future impacts of climate change such as lower rainfall and drought.
- Install bird boxes to encourage native birds to settle in your locality.
- Encourage stakeholders to leave rocks, plants and other natural objects as found.
- Ensure waste and food products are stored properly to prevent access by native wildlife.

#### Biodiversity - Do it soon

- Work with local conservation organisations or your council to get involved with native flora and flora protection activities.
- Host a tree planting day for members of your organisation.
- If your sport or recreational activity is in an area known to be affected by dieback, ensure you educate all participants and stakeholders on how to minimise its spread to other locations.

#### Biodiversity - Do it later

- Install fencing (temporary or permanent) to keep people from trampling sensitive areas such as fragile sand dunes and riverbanks.
- If you have or require walkways, ensure they are on stable and durable ground, not vulnerable vegetation.
- Consider developing an Environmental Management System (EMS). See the 'Want to do more?' section for more information.



## Want to do more?

This section is designed for larger organisations (with bigger environmental footprints, or those who may manage large sporting facilities or run larger sporting events) or just those organisations that feel they have progressed along the sustainability journey and want to push themselves to go further.

Some of the options below may require the assistance of external consultants – but don't forget, you can also get advice from other organisations that have already implemented these actions and learn from their experiences.

#### Environmental audits

An environmental audit will help you to understand what your impact is on the environment and how it can be improved. They can be targeted specifically to review energy, waste or water, or they can take a holistic look across all of these areas and more of your organisation. Environmental audits can be conducted on your own, or you may chose to use an external supplier experienced in the auditing process.

If you would like to try conducting your own audit, the Ecological Footprint concept is a useful tool for doing so.

A link to this is provided in Part 3.

## Surf Life Saving WA case study

Surf Life Saving WA (SLSWA) undertook a sustainability audit of two of their surf life saving clubs to understand the environmental impact and identify possible improvements that could be relevant for all SLSWA clubs. The audit identified positive actions already undertaken such as dual flush toilets, a conscious effort to reduce printing at both clubs and encouraging all member to bring their own drink bottles to refill.

A series of opportunities to further reduce their environmental impact were identified such as installation of efficient lighting, the development of a sustainable procurement policy and encouraging car pooling where possible.



# Sustainable event management and audits

Many sport and recreation organisations are involved in the running of events. This can range from small weekly competitions to regattas, state championships and large-scale competitions attracting international competitors.

Often these events are run outside of the day-to-day operations of the host organisation or outside of their own facilities. In these instances, they may fall outside of the actions listed in an organisation's action plan. Despite this, you can still choose to run the event as sustainably as possible by running through the same 'Commit, Plan, Do, Check' process as outlined previously. Many of the actions listed can be modified to fit the temporary or short-term nature of the event.

Additionally, some activities such as catering or waste management may need to be increased to support the size of the event. This in itself presents many opportunities to engage with suppliers and improve the event's sustainability even further. For example, ensuring that caterers reduce their waste where possible and provide biodegradable cutlery, plates and cups at all times.

## Rowing WA case study

Rowing WA commissioned an event sustainability audit of the Rowing WA State Championships Regatta to gain an understanding of the event's environmental impact and what could be done to improve it in the future. The audit measured the event's carbon footprint, waste generated and water consumed.

Through the process of conducting the audit, the high energy and water efficiency of the newly developing Champion Lakes facility was noted and the positive affect this had on the event's carbon footprint, emphasising the value of good venue selection.

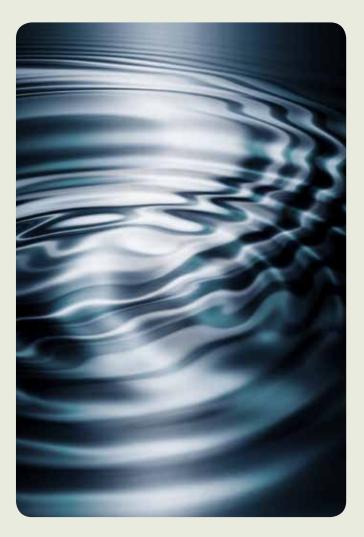


## Drug Aware Pro case study

The Margaret River Drug Aware Pro surfing competition sees over 200 men and women travel from around the globe to Margaret River to compete in this iconic surfing competition. In recent years, event organisers have worked to understand and improve on their sustainability performance. In the first year, it was about understanding what sustainable event management entailed with a focus on waste minimisation and energy conservation. This was achieved by providing recycling infrastructure, ensuring caterers used recyclable materials, the use of hybrid vehicles and changing the run patterns of on-site power generation (particularly for overnight lighting). Not only did this lead to an improvement in environmental performance, but the also reduced the event's diesel costs by about \$2000.

In the following year, organisers were looking to improve further and developed a sustainability policy to guide their actions; a sustainable procurement policy to assist with identifying like-minded suppliers; and chose to offset all competitors' travel emissions to reduce the event's greenhouse gas footprint.





## Sustainable procurement

Sustainable procurement is the process of choosing to buy goods and services that provide the optimum combination of costs and benefits where the social, economic and environmental impacts have been considered. This means coming up with a policy that gives preference to products that are more environmentally friendly.

For example, products that are more energy efficient; made of recycled material; are recyclable at the end of their life; or have minimal packaging should be given preference over others that are less so.

You may often find that by simply talking to other businesses within your supply chain and telling them of the sustainability goals you are trying to achieve, they may have other options to help you achieve your goals.

Developing a sustainable procurement policy will assist you with implementing sustainable procurement across all areas of your organisation. An example policy document has been provided in Part 3.

#### Vehicle fleet review

If your organisation has one or more vehicles it may benefit from a vehicle fleet review. If you want to conduct a vehicle fleet review, you can use the following steps to guide you in what to do:

- Develop a list of all vehicles used in your organisation.
- Understand what purpose each vehicle serves (i.e. player and equipment transport, regional and off-road driving, metropolitan driving only).
- Decide if the vehicles are fit for purpose, or if a smaller, more fuel efficient vehicle could achieve the same goals.
- Where possible, and where budgets permit, purchase or lease more appropriate and fuel efficient vehicles.

## Royal Life Saving case study

The Royal Life Saving Society (RLSS) of WA provides pool safety services, training and assessment throughout the state of WA. The Society has 23 vehicles to assist with delivering these services, which on average, travel over 31,000km each per annum.

In 2010, RLSS commenced an environmental program to reduce its environmental impact with a key component of the program to review the

vehicle fleet. Despite needing vehicles to travel long distances across the state. it was identified that a portion of 4WDs could be downsized to compact vehicles. reducing fuel demands and greenhouse gas emissions. Additionally, this change is expected to deliver fuel savings of \$8600 per annum.



## Life cycle assessment

A life cycle assessment (LCA) models the interaction between a product and the environment from 'cradle to grave'. It enables the estimation of the total environmental impacts resulting from all stages in the product life cycle, often including impacts not considered previously, such as raw material extraction, material transportation and ultimate product disposal (Australian Life Cycle Assessment Society, 2010).

Life cycle assessment is a very defined and detailed exercise that can be difficult and time consuming to undertake. If you are interested in exploring the option of LCA, links to further information have been provided in Part 3. Additionally, the Department of Sport and Recreation has created some guidelines on life cycle cost assessment that follows the same process of LCA, but applies the methodology specifically to costs. A link to these guidelines is also available in Part 3.

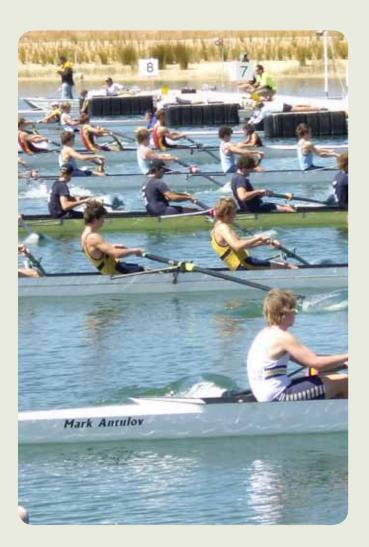
## Environmental management systems

An environmental management system (EMS) is used to manage your current and future environmental impact by integrating environmental management into the day-to-day operations of your organisation and long term planning. An EMS can be designed to suit the size of your organisation from a simple plan through to a comprehensive strategy that can be certified under the international standard ISO 14001.

There are a number of components in an EMS, including:

- Environmental impact identification.
- Objectives and targets.
- Operational and emergency procedures.
- Responsibilities and reporting structure.
- Continual improvement.

Links to more resources on EMS have been provided in Part 3.



# Part 3 – Additional tools and resources Sample documents

A pledge for sustainability



#### ABC Baseball Club

#### Our pledge for sustainability

At the ABC Baseball Club, we pledge to embed environmental sustainability into the ongoing management of our club. We recognise that we all have a part to play in ensuring the protection of our environment for the benefit of all current and future generations.

We pledge to monitor and strive to improve our performance on energy efficiency, waste management and water consumption. We aim to reduce our contribution to climate change and to actively protect and conserve our natural environment.

## A sustainablility policy

#### **ABC Baseball Club**

#### **Sustainability Policy**



ABC Baseball Club is committed to environmental sustainability through the following principles:

- . Minimal impact we will seek to minimise our impact on the environment by using water and energy efficient technologies, implementing effective recycling and waste management initiatives and reducing (and where appropriate offsetting) our carbon emissions.
- Environmental protection we will ensure our activities have no adverse affect on the natural environment and we will encourage others to care for and protect it.
- Education We will work with our members, staff, suppliers and other stakeholders to educate them on environmental and social issues and assist them where possible with making positive changes.
- Sustainable procurement we will seek to work with suppliers who have their own sustainability values embedded in their products and services and look for innovative ways to reduce our environmental impact throughout the supply chain.
- · Continual improvement we will regularly measure our environmental impact (emissions, water and waste), seeking to reduce our impact on a per member, year on year.



# Sample documents

A sustainable procurement policy

#### **ABC Baseball Club** Sustainable Procurement Policy

The primary purpose of this policy is to minimise negative environmental impacts of the ABC Baseball Club's activities by ensuring products and services are purchased

- · Conserve natural resources, materials and energy;
- · Maximise recyclability and recycled content;
- · Reduce toxicity to our natural environment.

#### POLICY

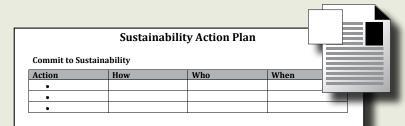
- 1. Procure environmentally preferable products and services where criteria have been established by governmental or other widely recognized authorities (e.g. Energy Star, Water Efficiency Labeling Scheme).
- 2. Integrate environmental factors into all buying decisions. For example:
  - Replacing disposables with reusables or recyclables
  - Supporting eco-labeling practices by buying products bearing such labels in preference to others, where they are available and provide value for money
  - Taking into account life cycle costs and benefits
  - Evaluating the environmental performance of vendors in providing products and services
- 3. Raise staff awareness on the environmental issues affecting procurement by providing relevant information and training.
- 4. Encourage suppliers and contractors to offer environmentally preferable products and services at competitive prices.
- 5. Encourage providers of services to consider environmental impacts of
- 6. Comply with all environmental legislative and regulatory requirements in the procurement of products and services.

Nothing in this policy shall be construed as requiring a product be purchased where it does not perform adequately for its intended use; is not available at a reasonable price or within a reasonable time frame.

#### RESPONSIBILITY

All ABC Baseball Club members shall identify and purchase the most environmentally responsible products and services that are available for the intended purpose and that meet the performance requirements. Factors that should be considered when determining environmentally preferable products or services include, but are not limited to:

## Sustainability action plan template



#### **Reduce Energy Consumption**

Action	How	Who	When
Do it now			
•			
•			
•			
Do it soon	·		·
•			
•			
•			
Do it later			
•			
•			
•			

#### Reduce Waste

Action	How	Who	When
Do it now			
•			
•			
•			
Do it soon			
•			
•			
•			
Do it later	<u>.</u>	<u>.</u>	
•			
•			
•			



Download from: dsr.wa.gov.au/sustainability

# More information

# Department of Sport and Recreation documents

Title	Link	Comments
Climate change	www.dsr.wa.gov.au/climatechange	How climate change is affecting sport and recreation now and in the future
Life cycle cost assessment	www.dsr.wa.gov.au/assets/files/facilities/Life_cycle_ Cost_Guidelines_2006.pdf	

## Other resources

Category	Source	Link	Comments
Carbon neutral	Low Carbon Australia	www.lowcarbonaustralia.com.au	
Energy efficiency	Energy Star	www.energystar.gov.au	An international standard for energy efficient office equipment
Energy efficiency	Energy Rating	www.energyrating.gov.au	Information on the energy efficiency rating scheme for appliances
Water efficiency	Conducting a Water Audit	www.watercorporation.com.au/_files/waterwise/ww_business/WBI_Conducting_a_water_audit.pdf	
Water efficiency	WELS	www.waterrating.gov.au	The WELS scheme is designed to make information available regarding a product's water efficiency
Biodiversity	Dieback	www.dieback.org.au	
Biodiversity	Leave No Trace	www.lnt.org.au/natureplay	
Life cyle assessment	Australian Life Cycle Assessment Society	www.alcas.asn.au	
Life cyle assessment	ISO 14040:2006	www.iso.org/iso/catalogue_detail?csnumber=37456	The International Standard for Environmental Management Life Cycle Assessment

# More information

## Other resources

Category	Source	Link	Comments
Environmental management systems	EMS	www.business.gov.au/BusinessTopics/Environmentalmanagement/ Businessbenefitsandplanning/Environmentalplanning/Pages/ Environmentalmanagementsystems.aspx	A resource on EMS provided by the Australian Government's Business Resource
Environmental audits	Ecological Footprint	www.epa.vic.gov.au/ecologicalfootprint	
General	Choice Magazine	www.choice.com.au	Choice Magazine provides unbiased reporting on a number of consumer products to assist consumers with making effective decisions
Sustainable events	BS8901	www.bsigroup.co.uk/en/Assessment-and-Certification-services/ Management-systems/Standards-and-Schemes/BS-8901	British Standard for Sustainable Event Management
Carbon neutrality	Carbon claims and the Australian Consumer Law	www.accc.gov.au/content/index.phtml/itemld/833279	
Carbon neutrality	National Carbon Offset Standard	www.climatechange.gov.au/government/initiatives/national-carbon-offset-standard.aspx	
Greenhouse gas accounting	ISO 14064	www.iso.org/iso/catalogue_detail?csnumber=38381	The international Standard for Greenhouse Gas Accounting

# More information

## Reference list

Australian Life Cycle Assessment Society (2010). Available from: www.alcas.asn.au

Bureau of Meteorology. (2011). Detailed Climate Maps. Available from: www.bom.gov.au/cgi-bin/climate/cgi\_bin\_scripts/annual\_rnfall.cgi

Conservation International (n.d.). Biodiversity Hotspots. Available from: www.biodiversityhotspots.org/Pages/default.aspx

CSIRO, Bureau of Meteorology. (2007). Technical Report 2007: Climate Change in Australia. Available from: www.csiro.au/resources/Climate-Change-Technical-Report-2007.html

Department of Climate Change and Energy Efficiency. 2010. Australian Greenhouse Emissions Information System (AGEIS). Available from: www.climatechange.gov.au/climatechange/emissions.aspx

Wastenet (n.d.). The Waste Heirarchy. Available from: www.wastenet.net.au/information/hierarchy







# Government of **Western Australia**Department of **Sport and Recreation**

#### **METROPOLITAN**

246 Vincent Street Leederville WA 6007 PO Box 329, Leederville WA 6903 Telephone (08) 9492 9700 Facsimile (08) 9492 9711 Email info@dsr.wa.gov.au

#### **GREAT SOUTHERN**

22 Collie Street
Albany WA 6330
Telephone (08) 9892 0100
Facsimile (08) 9892 0199
Email greatsouthern@dsr.wa.gov.au

#### **SOUTH WEST**

80A Blair Street
PO Box 2662, Bunbury WA 6231
Telephone (08) 9792 6900
Facsimile (08) 9792 6999
Email southwest@dsr.wa.gov.au

#### **GASCOYNE**

4 Francis Street
PO Box 140, Carnarvon WA 6701
Telephone (08) 9941 0900
Facsimile (08) 9941 0999
Email gascoyne@dsr.wa.gov.au

#### **MID WEST**

Corner of Edward Road and Horwood Road PO Box 135, Geraldton WA 6531 Telephone (08) 9956 2100 Facsimile (08) 9956 2199 Email midwest@dsr.wa.gov.au

#### **GOLDFIELDS**

106 Hannan Street
PO Box 1036, Kalgoorlie WA 6430
Telephone (08) 9022 5800
Facsimile (08) 9022 5899
Email goldfields@dsr.wa.gov.au

#### **PILBARA**

2/3813 Balmoral Road PO Box 941, Karratha WA 6714 Telephone (08) 9182 2100 Facsimile (08) 9182 2199 Email pilbara@dsr.wa.gov.au

# KIMBERLEY (KUNUNURRA)

Government Offices
Cnr Konkerberry Drive
and Messmate Way
PO Box 1127, Kununurra WA 6743
Telephone (08) 9166 4917
Facsimile (08) 9166 4999
Email kimberley@dsr.wa.gov.au

#### KIMBERLEY (BROOME)

Unit 2, 23 Coghlan Street PO Box 1127, Kununurra WA 6743 Telephone (08) 9195 5750 Facsimile (08) 9191 2436 Mobile 0438 916 185 Email kimberley@dsr.wa.gov.au

#### **PEEL**

Suite 3, The Endeavour Centre 94 Mandurah Terrace PO Box 1445, Mandurah WA 6210 Telephone (08) 9550 3100 Facsimile (08) 9550 3199 Email peel@dsr.wa.gov.au

#### WHEATBELT (NORTHAM)

298 Fitzgerald Street
PO Box 55, Northam WA 6401
Telephone (08) 9690 2400
Facsimile (08) 9690 2499
Email wheatbelt@dsr.wa.gov.au

#### WHEATBELT (NARROGIN)

Wheatbelt Development
Commission, Government Offices
11-13 Park Street, Narrogin
PO Box 54, Narrogin WA 6312
Telephone 0429 881 369
Facsimile (08) 9881 3363
Email wheatbelt@dsr.wa.gov.au