Guide to Sustainable Sailing Clubs
Introduction

The Guide to Sustainable Sailing Clubs is intended to provide practical information to assist the management of sailing and yacht clubs, enabling them to be more environmentally sustainable.

We would like to thank 11th Hour Racing for supporting the creating of this guide and our yacht club assessment tool. 11th Hour Racing is an international organization that harnesses the power of sport with an innovative approach to inspire solutions for the ocean.
Sustainability & World Sailing

World Sailing is the world governing body for the sport of Sailing, officially recognised by the International Olympic Committee (IOC). Founded in Paris in 1907, World Sailing now has 145 Member National Associations and 115 class associations.

World Sailing’s long term sustainability strategy entitled ‘Sustainability Agenda 2030’ sets out a bold ambition to achieve substantial change within the sport which can contribute actively to global sustainability.

The Sustainability Agenda 2030 supports the United Nation’s Sustainable Development Goals and the International Olympic Committees’ sustainable focus areas.
The aim of this guide is to encourage sailing and yacht clubs to embrace environmental sustainability and to act as a catalyst for clubs to make environmental improvements.

In its purest form, sailing is a sustainable sport, where humans harness the power of nature. Sailors rely on clean waters to be able to safely participate and are very reliant on a high quality of natural environment to enjoy their time on the water.

However, without proper consideration sailing can have an adverse effect on the environment as well as the infrastructure which supports sailors such as sailing and yacht clubs.

This guide is designed to help sailing and yacht clubs become more sustainable and supports the self-assessment tool which will create bespoke environmental improvement action plans.

Sailing facilities vary in size and their impact, this guide will highlight topic areas and updates with relevant case studies.
Benefits

So, what benefits are there in addressing environmental issues at your Club? There are four main reasons why it makes sense to take action:

1. It will almost certainly save the club money – energy and water efficiency, combined with effective waste management can save a significant amount of money, money that could be better spent on boats and equipment!

2. To conserve the boating environment – we want to enjoy our surroundings when we go out on the water and be sure that we are not polluting or damaging them in any way

3. To comply with national and local regulations which will affect every club in a number of ways

4. Your members may well expect you to be putting in place environmental measures and you may even be able to use your environmental credentials to attract new members. Surveys found that young sailors and the younger generation in general place environmental stewardship as a key priority to groups and activities they interact with.
How to use this Guide

This short guide gives an overview of the impacts that a club can have on the environment. There are also a number of suggestions and examples to reduce the environmental impact as much as possible. Each section outlines an issue, where the opportunities are for a club to make improvements and how you can start to tackle that issue.
Tips for Encouraging Support

If you are reading this guide, the chances are you have an interest in making your club more sustainable. One challenge may be to get the relevant committee to agree that it is worth putting some time and effort into. Here are some tips to help you gain agreement and support:

• Emphasise the benefits listed above – especially the fact that money will be saved

• Be aware of all the sources of help and advice (and funding) that could assist you. In many countries there are networks that offer free advice. In some countries, government subsidies may apply and there are awards and funding bodies which issue grants

• Consider having a designated sustainability officer on the committee of the club and follow the lead that many other clubs and sailing events have adopted

• Mobilise your junior members – they often have great ideas and will often be very knowledgeable about all things environmental

• Make sure you publicise what you are doing. Public Relations may not be top of the priority list at a Sailing Club, but there’s no harm in shouting about the improvements you are making - both internally to your membership and externally to the local press

For individuals not already on the committee of a club it may take a bit of time and effort to address your club’s environmental impacts and you will need the commitment of a few key people. Normally the information required to assess environmental performance can be sourced from the treasurer, commodore but sometimes the longest members of the club if there are no drawn plans. The review needn’t be a particularly onerous task and the benefits in terms of cost savings and visible improvements can be fairly quickly realised.
Direct Pollution

With the operation of a sailing and yacht club there are a number of activities that can directly and indirectly cause local pollution.

This should be a priority area for all clubs to address. To start with, it is important to identify possible sources of pollution which can come from surface water runoff from hardstanding, antifouling and wash down activities, refuelling and maintenance as well as general cleaning of the site and slipway maintenance.

Pollution can have a devastating effect on the local natural environment. Many pollutants can be absorbed by marine organisms and into the food chain. Certain pollutants may kill species and habitats and it is important to know what potential chemicals might be used at the club and whether their application is suitable.

Pollution can also be very visible with unsightly slicks that form in the water and on the waterline of boats in the water. For clubs with dinghies where people occasionally are in the water there can be a risk to human health. In some conditions algal blooms can be caused by nitrates from some activities but the effect can then lead to devastating impacts on local marine wildlife, this is especially true for clubs on a lake.
Direct Pollution

Aside from the fact that pollution is unsightly, a possible human health hazard and does untold damage to species and habitats, there is legislation in most countries to ensure that pollution does not occur.

In general, no polluting matter may enter a club’s waters without the prior consent of the relevant environmental agency – regardless of whether the discharge was accidental or not. Pollution control is generally about preventing incidents happening and putting a few good practice measures in place should ensure that pollution can be avoided.
Direct Pollution

Short term, quick wins
- Keep waste storage areas covered up and secure so waste cannot blow into the water.
- Store oil and fuels or any other hazardous substances away from surface water drains (i.e. those drains which collect rainfall from outdoor areas)
- Any oil or fuels stored on site must be kept in a secure container and these must sit within a secondary containment system, or bund
- Hazardous waste such as oil, oily water, paint and other chemicals shouldn’t be disposed of down any drains. This should be stored in containers and taken away as hazardous waste.

In the longer term
- If you have a large car park (50 spaces or more), you should consider installing oil separators. These can be fitted to surface water drainage systems to protect the environment from pollution by oils. They separate the oil from the water, and then retain the oil safely until it is removed. They are installed to contain oil leaks from vehicles and plant and accidental spillages. Separators are particularly important where the surface water drainage system discharges to a sensitive environment
- Try to locate a site drainage plan and work out which drains are surface water and which are foul sewer. Paint surface water drains blue and foul sewer drains red
- Inform members that nothing should go down the blue drains except clean water!

• Check what chemicals are used at the club, first of all establish if they are really needed, a common area when incorrect chemicals are used is for the cleaning of slipways. The most environmentally sensitive way to clean a slipway is mechanically with a brush or using a pressure washer
• Put in place an incident response procedure for dealing with spills
• Buy a spill kit- these are very cheap and will absorb oil and fuel but not water. It is always important to buy a suitable spill kit. If you have refuelling facilities the rule of thumb is that you should be able to contain a spill from the largest boat in the club
Waste Management

All clubs produce waste. Ranging from food, packaging, cleaning and maintenance products for the clubhouse and boats which will all be regular waste, but you may also find some waste items that are seasonal depending on your activity and one-off items such as old electrical equipment.

Firstly, it is important to understand the waste infrastructure where your club is located. In many countries the provision of mixed recycling services is common. Typically recycling is much more cost effective due to the fact that you are suppling a material which can be reused.

Find out the cost of the previous year’s waste management costs and you may also find out the split of recycling to general waste at the club.

If waste decomposes in landfill in conditions where it has no oxygen methane gas will be produced. Methane is a greenhouse gas which is 34 times more problematic than carbon dioxide over a 100 year period in terms of global warming.

In some countries waste contractors will send waste to be incinerated in controlled conditions where energy is produced from the combustion. Of course there has to be an effective control on the infrastructure and only non-recyclable waste should be considered for this option as air quality and toxic residues are a by-product of this method of waste management.

Prevention, reusing and recycling are the best ways to tackle this waste and are part of the waste hierarchy (as shown to the right).
Waste Management

In most countries waste produced at sailing clubs is categorised as trade or commercial waste. This usually means that there are a number of regulations that are associated with the storage and disposal of it. Generally the regulations are in place to ensure that no damage to the environment results from the improper storage or disposal.

In the last decade there has been a dramatic increase in the cost of waste disposal with some clubs accounting up to 5% on annual turnover being spent on waste.

By reducing waste produced in the first place, re-using what you can, and recycling as much as possible, you can really keep costs down.
Waste Management

Firstly, check with the national regulator what your legal obligations are.

As a minimum you should ensure your waste containers are suitable; strong, lockable lids and if necessary easily moveable.

Things to consider are:

Your waste should be secure so high winds will not blow rubbish into the local environment.

Check who has access to the waste, try to ensure that only members of the club can access, but make sure there is clear signage on or near the bin about what can be disposed of.

Example of things you do not want in the bin range from any hazardous materials and liquids such as antifouling, white spirits, antifreeze, solvents, acetone etc to flares which have caused some clubs significant problems.

You should make sure that the company who is disposing of your waste is licensed as required in your country. It is usual to have paperwork to show the transfer of waste and to ensure it has been taken to a licensed facility. It is a good idea to retain this for a few years.
Waste Management

Short term, quick wins

• Identify the waste streams that your club produces and see if there are ways that waste could be reduced – e.g. using durable reusable plastic or glass cups instead of disposable ones
• Get recycling! If you don’t already recycle, you will be paying a premium to your waste contractor for them to separate your waste for you. Contact a few waste contractors to get the best price and then label containers clearly so everyone knows what should go in each bin
• Check if the bins are actually full when emptied – do you have the same schedule throughout the year? Think about reducing or even stopping waste collections in the winter, this will reduce costs and emissions from the waste collection vehicles
• Check whether a food waste or composting option exists that can be implemented

• Make sure hazardous waste doesn’t get mixed in with general or recycling waste. Hazardous waste includes oil, batteries, paint tins, trays and used brushes, contaminated rags and electrical equipment. If boat maintenance is carried out on club premises then it’s likely that hazardous waste is being produced. You will need to set up (and clearly label) separate bins for hazardous waste and normally have to arrange a separate waste contract to take it away
• Make sure members are aware of what can and cannot be disposed of at the club. Encourage members to take waste home with them, especially hazardous waste where they should take to the local municipality facilities that will be free and more specialised saving the club money
• Think outside the box! Sometimes metal and old sailing equipment can be sold or reused or repurposed

In the longer term

• For large clubs it may be worth investing in a compactor. Generally you pay by volume of waste to be disposed so this is a way to reduce vehicle movements and collections saving some money
• Set up an ‘of use to others’ area where boat parts/sailing clothing can be reused
• Compare year on year to report back to the club on recycling rates and also cost savings made
• Continually review ways to reduce the amount of waste this can be working with suppliers who take back packaging
Stokes Bay SC

Stokes Bay Sailing Club has 650 members and is located on the South coast of the United Kingdom and is affiliated to the Royal Yachting Association.

The club reviewed their contract and were paying £3200 per year to dispose of waste with no recycling.

Setting up a recycling scheme both inside the club and in the boat park with clear signage and with the help of posters in the club and reminders in the clubs circulars, members soon were recycling much of the waste at the club. The retendering of the waste contract resulted in a 64% saving on the waste costs and a 50% recycling rate was achieved.
Energy Efficiency

Unless all your energy is supplied by renewable sources (solar, wind, hydro, tidal, geo-thermal), your club’s use of energy for lighting, heating and for powering equipment and appliances will be contributing to the release of carbon dioxide emissions. CO2 is a greenhouse gas and man-made greenhouse gas emissions are widely acknowledged to be contributing to climate change. Climate change is leading to sea level rise, more extreme weather conditions and increased flood risk – as well as many other undesirable impacts.
Energy Efficiency

Arguably we all have a responsibility to reduce our energy consumption – energy efficiency is one way to ensure that our greenhouse gas emissions are lowered. Reducing energy use is likely to lead to significant cost savings, particularly as the price of energy is on the increase.
Energy Efficiency

Short term, quick wins

- Carry out an energy audit of your club using the World Sailing energy audit template
- Insulate your club house as much as possible and fit draught excluders. A large amount of heat will escape from poorly insulated roofs and heating pipes and from doors and windows that don’t fit properly. Similarly if you are in a warm climate and need to cool the clubhouse the same principles apply
- Install low energy light bulbs around the site, halogen bulbs should all be replaced with LED equivalents that use 90% less energy
- Have boilers and heating systems regularly serviced
- Ensure fridges and vending machines are installed away from heat sources and windows which receive direct sunlight
- Check thermostats and heating times to make sure they only come on when needed
- Keep windows and light fittings clean to gain maximum light
- Implement a “switch off” policy for lighting and equipment. Consider colour coding switches so that members know what can be switched off when leaving the club and what must be left on
- Monitor your bills so you can quickly spot if energy use shoots up – an indication that something has been left on that shouldn’t have been perhaps?
- Record electric/gas/water meter readings, this way you can identify when there is an issue straight away
- Buy an energy meter, it is great for working out the baseline usage (i.e. overnight or when the club is not in use). This can then help with reducing the energy usage
Energy Efficiency

In the longer term
- As appliances need renewing (e.g. fridge, oven, microwave, hand driers), look for the most energy efficient ones available. They may cost a bit more, but that expense will be recouped in energy costs saved.
- Insulate wall and roof cavities.
- Replace water tanks which heat and store water with instant “heat on demand” systems.

What can I do?
- Consider installing renewable energy technologies on your site. Solar thermal heating systems could supply a lot of the hot water for showers. Solar photovoltaic panels have a high up-front cost, but the Feed-in Tariff (FIT) scheme guarantees a minimum payment for all electricity generated by the system, as well as a separate payment for the electricity exported to grid. These payments are in addition to the bill savings made by using the electricity generated on-site. Usually solar PV and wind turbines prove to be a financial investment with paybacks of around 8 years but due to a guaranteed Feed-in Tariff for 25 years a number of clubs are considering renewable technologies.
Water

Around the world water is a scarce resource, even in some countries where there is a lot of rainfall the level of water use can be higher, or the concentration of usage is not where the natural reserves are. Increasing populations, as well as climate change, mean that in many places there will be increased water stress in future.
Water

If the figures aren’t enough to make you want to save water, then reducing water use will also help you save money. Remember that water is paid for twice since you typically pay for water supply and for waste water.
Water

Shorter term, quick wins

• Put a cistern displacement device in toilets to reduce consumption during flushing if they are old toilets with large cisterns. This could be a 1-litre plastic bottle filled with water. Your water company may supply water saving devices for free.

• Fit plugs to basins to encourage users to fill the basin rather than use running water.

• Install trigger devices on all hoses to provide automatic shut-off.

• Fit water butts outside club buildings to collect rainwater that can be used for washing down boats. Intermediate Bulk Containers (IBCs) hold 1,000 litres and can be stacked one on top of the other.

• Monitor your bills – if water use increases significantly, there could be a leak on your site. Any leaking pipes on the club site are the club’s responsibility.

In the longer term

• Install toilets with a dual flush facility. Toilet flushing accounts for 30% of daily water use – with old toilets using as much as 14 litres per flush compared to new dual flush models which use as little as 2.6 and 4 litres per flush.

• Install urinals with flush controllers – these can save around 65,000 litres of water a year per urinal.

• Consider fitting taps and showers with automatic shut-off and / or fit aerators to taps and water-save shower heads which typically halve flow rates while still providing a good water flow.

• For major club redevelopments, consider installing a rainwater harvesting system or grey water recycling.

• Smart water meters can be purchased where water consumption is measured every 15 minutes and this can be monitored remotely on a phone or computer. For larger supplies i.e. big pipes, this can be a worthwhile investment to identify leaks that could be underground or even underwater on pontoons rather than waiting for the next rather large bill from the water company.
Case Study - Water

Parkstone Yacht Club, Poole

Parkstone Yacht Club is a large club (2,500 members) based in Poole, Dorset, United Kingdom and affiliated to the Royal Yachting Association. It has a 200 berth marina and caters for dinghy sailors and yacht racers and cruisers alike. The Club had been spending £10,000 a year on water with a persistent problem of hoses being left running in the marina.

To reduce water usage the club took the following steps:

- Twice daily meter readings were taken over a period of 2 weeks
- Meter readings were compared with the same period in the previous year - water usage had roughly doubled
- All water equipment was monitored: Toilets, urinals, showers, kitchen, bar, hoses

- The results showed a faulty urinal sensor was emptying the 15ltr cistern every 2 minutes, using 21 cubic metres of water, equivalent to of £5,000 per year. The sensor was repaired and now uses less than 1 cubic metre per day
- Extra meters were installed and monitored in the clubhouse, marina and yard
- Next the club installed 20 durable brass hose nozzles in the boat wash-down area and on the pontoons costing £100 and 2 hours’ work

Outcomes

- Water bill was reduced by 70% generating a saving of approximately £7,000 per annum
- Extra meters revealed the club had been paying for removal of waste water from the yard and marina. Subsequently refunds of thousands pounds for previous inaccurate bills have been received. One £400 meter paid for itself within 3 months
- Monitoring diagnosed 2 freezing damaged burst pipes within hours of this occurring, which could have gone undetected for weeks
- Nozzles were well received by berth holders as water pressure increased and were well designed
- With the savings made, the club is now looking into rain water harvesting systems for boat wash-down and replacing shower heads and taps with low-consumption versions
Biodiversity

Biodiversity is the degree of variation of life forms within a given ecosystem or an entire planet. Biodiversity is one measure of the health of ecosystems and provides many ecosystem services that are often not readily visible. It plays a part in regulating the chemistry of our atmosphere and water supply and is directly involved in water purification, recycling nutrients and providing fertile soils. Human activity is resulting in huge losses in biodiversity – whether through agriculture, urbanisation, pollution, de-forestation – and the implications of this for human health (and that of the planet as a whole) are extremely serious. Non-native invasive species which are introduced into an ecosystem can eliminate populations of native species and there are many examples of where this has happened in the aquatic and marine environment.
Biodiversity

There are ethical grounds for conserving biodiversity, as many people believe that every species is of value in its own right. Clubs can help to limit the spread of non-native invasive species by implementing simple policies and awareness campaigns to its members. The general principle is to clean and dry dinghies after use especially if the boat is visiting. A dinghy should be cleaned in the place it last sailed to ensure there is no spread of invasive species.

For yachts and clubs that have boats sail to them it is important to make sure visiting boats are aware of policies such as in water cleaning for heavily fouled visiting boats should be discouraged. Wash down areas should have sufficient filtration to stop biofouling going back into the environment.

Introducing measures to increase biodiversity on the club site will (hopefully) be well received by nature conservation groups and may help a club to manage any potential disagreements about the impacts of boating on local flora and fauna. Some inland racing events have been cancelled due to fears of spreading non-native species so it is important to manage this in order for racing to go ahead.

There are a number of ways to help increase biodiversity both on land and in the water such as installing bird boxes, planting certain species of flowers etc.
Biodiversity

Short term, quick wins

• Ask all members, when recovering a trailer, dinghy or RIB, to drain water from every part of the boat and all equipment that can hold water
• Ask members to clean all parts of the boat, trailer and equipment that comes into contact with the water before leaving the water catchment area. Remove any visible plant, fish, animal matter and mud and dispose of in waste bins
• Set aside a small area as a “wild” area. Undisturbed ‘wild’ areas where grass and wildflowers grow can provide valuable shelter and food for wildlife. Damp log piles create an ideal winter home for hibernating frogs, toads and newts
• Put up bat and bird boxes to encourage more nesting on your site

In the longer term

• Plant native species of trees, shrubs and hedgerows. These will help to attract a wide range of insects, birds and small mammals that feed on them. Choose species with berries or nectar rich flowers, and that are characteristic of local semi-natural habitats
• Plant shrubs closely together in groups or as a hedge to provide living space and food for all sorts of wildlife
Events

Regattas and racing events are often the highlight of a Club’s calendar but extra boats on the water, increased visitors (many of whom will arrive by car), the increase in energy and water used and the extra waste generated will all add up to a greater impact on the environment.
Events

By implementing some simple measures to address the environmental impacts of the event, you could make your event more attractive to potential sponsors and competitors, save money and generate positive press which can help to ensure the event has a high profile. Event participants, supporters and spectators are also likely to want to ensure that they do as little damage to the environment as possible, while continuing to enjoy the event.
Events

Short term, quick wins

- Look at the Sailors for the Sea clean regatta resources, large events such as World Championships should aim to follow the World Sailing level which has been created in conjunction with Sailors for the Sea
- Limit the amount of paperwork that is sent out to competitors prior to the event. Try to use email or an event webpage wherever possible and practical to maximise digital use
- Ensure waste bins are clearly marked with both written and pictorial signs to indicate what can go in them (bearing in mind that written signs may not be understood by participants from overseas)
- Do not change rule 55 which relates to trash in the water
- Hire in equipment or re-use equipment from previous events, rather than buying new where possible
- Try and source supplies locally wherever possible, and use products that are labelled Fair Trade whenever possible
- Look for products that are recycled or are made of recyclable material – even prizes could be made of recycled glass for example. Timber should be FSC accredited and paper should have at least 75% recycled content
- Provide details of access to the venue via public transport in the event publicity materials and on the website
- Encourage car sharing amongst competitors / officials and spectators – publicise any local car share websites
- Try to encourage event attendees to stay at locations near to the event venue to minimise travelling and provide details of nearby accommodation
- Take meter readings (electricity, gas and water if possible) before the event so that you can work out how much of each has been used.

These measurements can serve as baseline figures against which to make improvements in future events
- Require that all motorised support vessels carry spill kits to deal with small amounts of spilt oil and fuel and include this in the event joining instructions
- Have a supply of spill kits available for visiting boats (either lend them / hire them or sell them)
- Establish a bunded on-shore refuelling point and encourage all safety boat drivers to refuel in this area, preferably using no-spill refuelling devices
- Include details of sensitive habitats and wildlife in the Sailing Instructions and ask competitors and officials to take special care or to avoid these areas
Events

In the longer term

• Try and prevent waste in the first place by sourcing products with less packaging and by keeping any packaging to a minimum

• Provide competitors with a refillable water bottle (with space for them to write their name on it) and install water coolers or use taps at the venue to reduce plastic bottle waste

• Install outdoor water refill points
Corpus Christi Yacht Club, Texas, US Sailing affiliated

The 2018 Youth Sailing World Championships was the first World Sailing Championship to focus on sustainability and ocean conservation – acting as a benchmark for future events, a key step for World Sailing in the delivery of its Sustainability Agenda 2030. 11th Hour Racing, the official Sustainability Partner of the Championship, provided critical guidance and funding to offset costs.

The event host, Corpus Christi Yacht Club, created a ‘green team’ to ensure the 2018 YSWC covered all aspects of environmentally conscientious event management. The green team included leaders in local and state conservation groups, representatives from Texas A&M University-Corpus Christi, and key personnel from the City of Corpus Christi. This group was tasked with creating a strategy to address the environmental, social, and economic impacts of the regatta.

To develop this plan, the green team gathered ideas and input from internal and external stakeholders, including World Sailing, 11th Hour Racing, and Sailors for the Sea. After careful analysis the following goals were set forth:

• Reach the Platinum (highest) level of Clean Regatta, as designated by Sailors for the Sea
• Promote environmental awareness and ocean conservation to the participants in the regatta and local South Texas community
• Create an environmental legacy program for the South Texas Community and future World Sailing Championships
• Publish a sustainability report referencing the Global Reporting Initiative (GRI) Standards, which can be used as a benchmark for subsequent sailing and sporting events.

The committee also laid out five critical areas for the plan to cover: environmental impact, behavioural habits, education programs, gender/nationality representation, and legacy programs.

“Every organizer running a sustainable event will face unique challenges. Challenges for CCYC included hydrating over 500 people in extremely hot, humid conditions; composting when the city had no compost facilities; making changes amid scepticism and apprehension; working with vendors who were chosen prior to the decision to run an environmentally friendly event; and more. There was no blueprint for us to follow. The 2018 YSWC was the first YSWC to include an environmental focus.”

Elizabeth Kratzig, Green Team Co-Chair, 2018 Youth Sailing World Championship Committee Volunteer
Case Study - Events

Corpus Christi Yacht Club, Texas, US Sailing affiliated

Outcomes

The hard work of the green team committee proves that a dedicated group of volunteers, supported by the organization authority, can bring forth excellent results, which are detailed in the report’s 85 pages. Below is a selection of highlights:

- Avoided the use of 65,000 single-use plastic water bottles (12 oz.) by using refillable water bottles and water refill stations.
- A total of 3.28 tonnes of waste was diverted from the landfill or 89.8% of total waste created. This meant 53.8% was recycled and 31.5% was composted – preventing 22 tonnes of carbon dioxide from being emitted.
- 400 re-usable bungee cord connectors replaced plastic zip ties, banners and flags were held with renewable bamboo flag poles – the bamboo poles were given to community gardens for re-use after the event.
- 283 storm drain inlets were marked with information about the flow of pollution and to prevent illegal dumping.
- More than 400,000 people were exposed to the problem of plastic pollution through art events that engaged the broader public, including an exhibit at Corpus Christi International Airport.

Download the report here