



Topic 4

Reducing Waste

Trainer's guide

World Sailing Sustainability
Education Programme

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Welcome to the World Sailing Sustainability Education Programme!

World Sailing has a long term sustainability strategy called 'Sustainability Agenda 2030'. The aim is to ensure that sustainability is embedded into our sport.

This Education Programme aims to encourage participants to:

- **Implement sustainable actions on and off the water**
- **Increase awareness of sailors' impact on the ocean and marine life**
- **Increase awareness of climate change and how actions can reduce effects**
- **Understand sailing's place within the UN Sustainable Development Goals**

The United Nations Sustainable Development Goals are 17 global goals set by the United Nations General Assembly in 2015 for the year 2030. These goals include ending poverty, combatting climate change, fighting injustice and inequality for a better, more sustainable world. World Sailing is committed to contributing to the United Nations 2030 Agenda for Sustainable Development. World Sailing's Sustainability Agenda 2030 outlines the Sustainable Development Goals that the sport can contribute to, as well as the alignment with the 5 focus areas of the International Olympic Committee's Sustainability Strategy. Sailing is part of a global movement to create change and positive impact, and sailors themselves can be part of this through their actions, on and off the water.

You can access World Sailing's Sustainability Agenda 2030 at the following link: bit.ly/2sjGrKZ

Sustainable Development Goals



World Sailing's Sustainability Agenda 2030 is aligned with the 5 focus areas of the IOC's Sustainability Strategy



Topics

There are 6 topics in the Sustainability Education Programme.

Topic 1	Race with World Sailing!
Topic 2	Resources & Climate Change
Topic 3	Navigating Wildlife & Biodiversity
Topic 4	Reducing Waste
Topic 5	Oil & Fuel
Topic 6	Boat Cleaning & Maintenance

There are links between the topics, but you can use them in any order with your students.

For each topic, there is a...



Age colour coding

6-8 years

8-10 years

10-12 years

This is the Trainer's Guide for **Topic 4 Reducing Waste**. The objectives of this topic are:

- Increase understanding of different types of waste and waste hierarchy
- Examine waste generated by sailors and sailing clubs
- Develop understanding of the circular economy
- Look at how waste on boats and in sailing clubs can be reduced
- Propose ideas and changes to reduce plastic waste on boats and in sailing clubs



Worksheet answer key

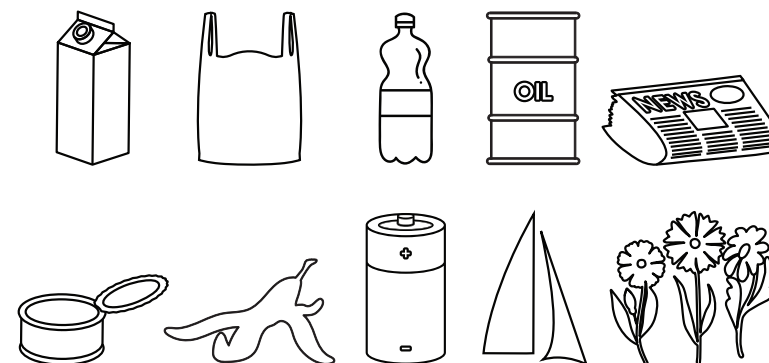
Vocabulary review answer key

Key word	Meaning	Trainer prompts
Waste	Items we don't need anymore and want to throw away.	We brought water out on the dinghy to drink and now we have a lot of empty plastic bottles that we don't want anymore.
Compost	Organic material that has been broken down by microorganisms and oxygen.	The fruit and vegetable peels left from our lunch or dinner. We don't need to put these in the regular bin because they can break down organically.
Hierarchy	A group of things or people in order of power or importance.	Skipper, First Mate, Second Mate.
Biodegradable	Something that can be broken down into small parts by other living things (like bacteria).	Vegetable peels, egg shells, paper.
Circular Economy	A system that aims to get rid of waste by continuing to reuse materials again and again.	Instead of throwing an old sail away, it can be redesigned and reused as a different product for sale.
Groundwater	The water found underground in the cracks and spaces in the soil, sand and rock.	If we dig down deep enough or look under things like rocks, we will find this type of water.

Don't throw it out! answer key

Suggested answers for reusing waste

The objective is to get your crew thinking on a personal level: what can they reuse their waste for, in a simple, easy way. For higher-order thinking, you could talk about how some waste materials can be broken down and repurposed into things like boat parts.



plastic water bottle	Vase, storing other liquids, watering can.
metal can	Pencil holder, planter for herbs and small plants.
plastic bag	Gloves for handling messy food, grocery shopping bags, clothes storage.
milk carton	Craft projects, growing seeds, paint pot.
newspaper	Wrapping paper, waterproofing for animal bedding, washing windows.
boat sail	Tent, shower curtain, bag.

Clean up time!

Before the session, you will need to prepare the safety equipment and bags to collect the waste.

Decide on the amount of time you want your crew to do a shore clean or clean up around the sailing club (suggested time: 15 minutes). Run through the safety instructions that are included on the worksheet. Form smaller crews of 2-3 people to work together on the clean up.

After the timed clean up, bring the crew back together as a whole group and let them know that they are going to be examining the waste that they have found.

Don't forget!

- Use any safety equipment (gloves, picker etc) that your instructor gives you
- Never pick up sharp objects, needles, or animal faeces. If you see anything like this, tell your instructor
- Stay within the boundaries that your instructor gives you

Age: 8-12 years

Item	Where was it found?	What can we do with it? (Reuse, Recycle, Compost, Discard)	If it is reusable, what could we do with it?
Plastic bottle.	On the shore.	Reuse.	Watering can for plants around the sailing club.



Extension activities

Age: 6-12 years

Bingo

A fun game to review the items found in the Clean Up Time! activity.

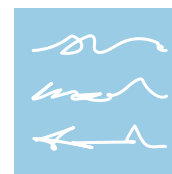
Materials:

- Notebooks/paper
- Pen/pencil
- Items collected in the Clean Up Time! Activity (or prepared by instructor)



Step 1

Ask each member of your crew to write the numbers 1-10 down a page.



Step 2

Next to each number, write an item they remember finding during the Clean Up Time! activity.



Step 3

Pull out an item from the container (i.e. a water bottle).



Step 4

If they have this item on their list, they can put a tick next to it. When they have all their items ticked, they can shout 'BINGO!'.



Step 5

Continue pulling items from the container until someone shouts, 'BINGO!'.

Trash dash

Use the items collected in the Clean up time! activity to review your crews' understanding of different types of waste. This will help develop your crews' teamwork and communication skills and get them moving!

Age: 6-12 years

The crew will need enough space to be able to run back and forth.

Materials

- Items collected during Clean up time! activity (alternatively, items can be collected by the instructor and brought into the session)
- 4 ropes (long enough to make large circles)
- 2 large containers/buckets/boxes to hold the items
- 4 labels - Reusable, Recyclable, Compostable, Rubbish (to go above each of the rope circles)

Pre-task preparation

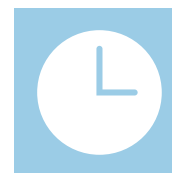
At 1 end of the space, place the 2 containers (both full of items). 10 metres away (or at the end of the space), make 4 large circles with the rope and place a label above each 1.

Take a look at recycling policies in your city/country. What can actually be recycled differs a lot between places.



Step 3

Explain that each team have items that they need to sort out. 1 at a time, a member of each team will take an item from the container, run to the circles and place the item into the correct category (Reusable, Recyclable, Compostable, Rubbish).



Step 4

You can time the teams to sort as much rubbish as possible in (e.g. 3 minutes) or you can allow them to continue until they have emptied the container.



Step 5

As a whole group, examine the 4 circles and check that items have been sorted correctly. Allow the crew to self-correct as much as possible.



Step 1

Divide your crew into 2 teams.



Step 2

Ask each team to create a line behind a container of items.



Design challenge

Age: 6-12
years

Waste as a resource

Get the crew to think of waste as a resource in this design challenge. Encouraging creativity and critical-thinking, they will design a new product from an already-used item.

Materials:

- Items collected in the Clean up time! activity (or pre-prepared by instructor)
- Poster paper
- Markers/Pens/Pencils



Step 1

Ask the crew to form smaller crews of 2-3.



Step 2

Explain that as a team, they are going to design a new product from something that people consider waste.



Step 3

Ask them to select 1 item from the reusable category that they found during the Clean up time! activity.



Step 4

Give the teams 2 minutes to brainstorm their ideas- what could their item be reused as? Encourage them to be as creative as possible, all ideas are good ones!



Step 5

After the brainstorm, ask them to select 1 of their ideas.



Step 6

Give teams 20 minutes to develop their idea, creating a poster to explain it.



Step 7

Each team will present their design to the whole crew. Encourage questions to be asked.

Optional:

This task could be run as a competition; participants can each vote for the best design (they can't vote for their own!)





Photos

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