



A part of Women's World Match Racing Tour

Arranged by

ROYAL DANISH YACHT CLUB

Skovshoved Harbor, Denmark

23-25/9 2022





Bio-Medals made of 100% seaweed and seagrass only!

Background:

Royal Danish Yacht Club (KDY) is a non-profit organisation and is Denmark's largest yacht-club, with more than 2,000 members of all ages. KDY members come from all levels of sailing, ranging from the international elite sailors, where KDY have Olympic level selected crews, to beginner and junior level sailing.

KDY organises both national and international regattas such as the World Championships, the European Championships, Nordic and National Championships. During the 2022-season, KDY has already hosted more than 20 national and international regattas.

Sustainability is a key priority for KDY, and a "Green Team" dedicated to the management and implementation of the sustainability strategy, using the guidelines prepared by Sailors for the Sea, has now become embedded in the KDY regatta-organisation.

KDY feels a strong sense of responsibility to lead the way, both nationally and internationally, when it comes to being a sustainable sailing club and promoting sustainable regattas.

KDY gives a high priority to arranging clean regattas according to the guidelines set out by **Sailors for the Sea**. Also, KDY is trying add new elements to the way we can achieve further results. This will be measured by way of making all regattas and daily activities sustainable and ensuring that sustainability is embedded in all KDY activities.

Action and process:

To achieve a sustainable and clean regatta requires planning and a close cooperation between the Race Committee and the Green Team with reference to all (but not limited to) five action points mentioned below.

- 1) Regatta management and coordination.
- 2) Registration, results and communication.
- 3) The race committee with a support team on the water,



- 4) The jury members - committee, and
- 5) The onshore team organising the social events and ensuring food, beverage etc.

Follow-up:

An important point in making a Clean Regatta a success is to follow up and share the experience and the process with other clubs, both locally, regionally and of course, globally. Accordingly, KDY has established a follow-up strategy and clear guidelines to ensure that the effort is being optimized for future Clean Regattas. (See guidelines below.)

GUIDELINES – BEST PRACTICE:

The following guidelines are based on the experience and work undertaken before, during and after the regatta.

The objective is to achieve as many, and if possible, all of the 20 points recommended as” best practice” outlined by Sailors for the Sea in addition to develop new initiatives.

Most of the Sailors for the Sea 20 points are already embedded in the KDY standard regatta programme, including but not limited to, the elimination of single-use water bottles and plastic straws, serving food with plastic-free dinnerware and new waste collection processes. Information and communication about the importance of following the Sustainability Program outlined by Sailors of the Sea is still a key objective, however, with most of the 20 points embedded in race planning, it does allow the Regatta management to add new and important sustainability features to the pallet of tools.

Four new sustainable features have been launched for the KDY Women’s Match Race.

- 1) “Long sleeves regatta shirt” made from 100% recycled fabric material.
- 2) New safety and tracking watch “SafeTRX Active Watch”
- 3) Bio-Medals made of 100% seaweed and seagrass only!

All three features are discussed below, including the use of KDY’s newly acquired 100% Electric self-positioning and self-sailing marks, MarkSetBot. This report will indeed focus on the guidelines from Sailors for the Sea and indeed, also present new initiatives as bonus points.

The KDY Women’s Match Race is a three-day event with fourth practise day, having said that, the workplan is still the same as traditional Championships.

- 1) Start your planning well in time before the regatta.
- 2) Call a meeting with all the parties involved and make a detailed plan and delegate responsibilities and deadlines.
- 3) You will not be able to achieve a Clean Regatta alone, and hence, contact your partners in advance and ensure time is available to deliver the needed services and products.
- 4) Working together with local and regional suppliers is important. They can assist with logistics and in particular with waste disposal and also general communication.



- 5) Arrange communication jointly with local partners.
- 6) "Harbour clean-up" has proven to be very fruitful, both to ensure a sustainable regatta but also for communication. All harbour visitors will notice the clean-up team and their work both on shore and in the harbour basin.

1. Eliminate Single-Use Water Bottles and Provide Water Refill Stations

A free reusable water bottle sponsored by KDY, was included in the welcome bag that was given to all the sailors and officials. The local water board, Novafos, arranged for three water-stations, with each station having four outlets. The water filling stations were strategically placed on the harbour area in signposted areas.

The Clean Regatta bottles and water stations received positive feedback from the sailors.



Water Refill Stations Reusable Water Bottles

A reusable water bottles for each of the 72 participating sailors were placed in the welcome bags and also given to all the volunteers:

In addition, each of the crewmembers were given a "long sleeves regatta shirt". These are high-quality "long sleeves regatta shirt" made of 100% recycled fabric to minimize the impact to the environment; in addition, the shirt logo is printed with water-based material.





This was the same way the regatta prize drop background and “sponsor-wall” (see below) were made, without any harmful chemicals and with only water-based digital logo-print.



2. Eliminate Plastic Straws.

Not a single straw was used during KDY Women’s Match Race 2022.

KDY-reusable drinking cups were used at all the social events including the Sunday prize ceremony.





3. Serve Food with Plastic-Free Dinnerware

As stated above, the KDY reusable glasses were used at post-race events.

The KDY branded reusable glasses were very popular. Several participants brought some home, as they were a "Unique Collector's Item" and yet another push factor for the usage of reusable and environmentally correct items. After just three times of use, the CO₂-emission is lower than for single-use plastic equivalents.

Dinner on the Friday evening was served on porcelain plates and re-usable cutlery from recycled plastic were used. Cutlery has been used for previous sustainable regattas as well.

4. Use or Provide Reusable Bags.

Each boat was given a reusable welcome bag made of Fair-Trade Cotton, which was bought from Danish hypermarket Bilka, a part of the Danish Sailing Group.



In addition to the reusable welcome bag, each boat was given red environment rubbish bags from The Danish Royal Navy. The sailors were instructed to use the red rubbish bags to collect all the waste on-board, and after the day's racing, bring the rubbish ashore to one of the recycling stations positioned at the harbour (see below) and sort the rubbish according to material.





5. Award Practical Items or Use a Perpetual or Upcycled Trophy

KDY has established a co-operation with a young Danish designer, Mathias Falkenstroem, who, together with Danish Technological Institute has developed, and is now producing a material based 100% on seaweed and this biological material can be used to produce winners' prizes. Such prizes were used for the KDY Women's Match Race 2022.

As will be stated in point 14 below, KDY has invested in a DPOL, which has enabled the cleaning the waters in the harbour, which includes collecting dead seaweed.

For the production of the prizes, the company has included some seaweed collected in Skovshoved Harbour by the DPOL as well as seaweed collected at local beaches in the Oresund area (close to the KDY harbour). All assemblies was used to produce 100% bio-medals.

The podium winners of the KDY Women's Match Race received the world's first 100% bio-based sustainable medals. Made from seaweed, seagrass and corns from tomatoes, to make the medals water-resistant (see prize-giving and medals below).

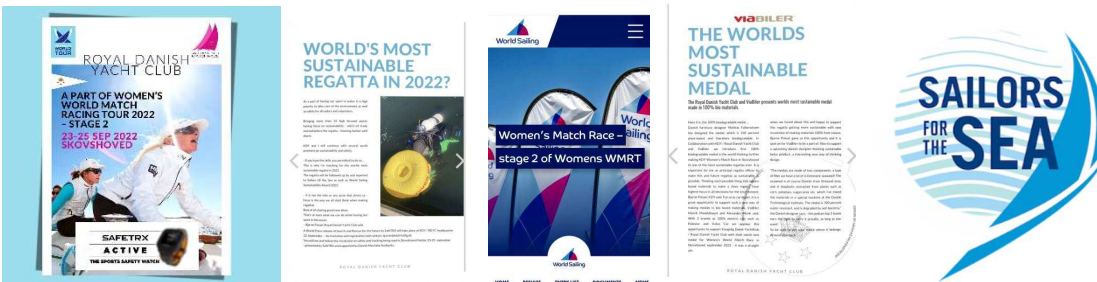




6. Publicize Your Sustainability Efforts

The Regatta Team has been most ambitious with the objective to arrange a first class “sustainable regatta” and accomplish all the 20 points guidelines according to the Sailors for the Sea plus additional bonus points.

A pre-regatta magazine was published and electronically distributed to all the sailors as well as published on KDY SoMe platforms as well as World Sailing



In addition to the above-mentioned magazine, the Race Committee organised and promoted the above mentioned “medals” and in addition, the committee distributed, as mentioned above, 100% recycled fabric “long sleeves regatta shirt” for all the participants.





Safety is also considered part of the World of sustainability and the KDY Race Committee had arranged for all the participating sailors being equipped with a SafeTRX Active Watch. A first of its kind tool that sends distress signals with a tracking signal in low frequency, up to a range of 24 kilometres. The signal can also be tracked with 4G and GPS, and makes tracking possible during training and indeed in case of search and rescue.

Niels Van Kampen, 8Well SafeTRX, introduced and presented all the participants a SafeTRX Active Watch to wear. This extra piece of equipment was indeed considered an important part of communicating the message of being a “Sustainable Regatta”.



Danish Maritime Authority (working for safety at sea) was campaigning and addressing “Stay Safe” during KDY Women’s Match Race 2022.



7. Involve Local Organisations

Local organisations are key to success and indeed also to ensure follow- up and keeping the momentum post regatta.

The local organisations included:



1. Skovshoved Harbour.
2. Novafos, the local water board, arranging water stations for refill of reusable bottles.
3. A major part of the event sponsors was either locally located.
4. @Underwaterambassador and diver Helene-Julie Zofia Paamand supporting clean harbour.
5. Danish designer Mathias Falkenstroem
6. Sejl Sikkert (Sail Safe) ambassadors from Danish Maritime Authority

Cached in the water, cached by a fishing net during a dive @Underwaterambassador. (The picture was sold and the proceed donated to sustainability activities.)



8. Post Educational and Reusable Signage

The examples of signage as pictured below are reused at all major events at KDY, introduced in 2021 at J70 European, they have been used at several regattas since, including KDY Women's Match Race 2022



Selected reusable signage.

A process book will be updated and made available for other sailing clubs. Also, the KDY youth team as well as all volunteers during future regattas will receive teaching on how we prepare for a sustainable yachting event.

9. Serve Local Food or Source Sustainable Seafood:

Local food was available, salad bar, vegetarian food, pasta salad as a choice as well as gluten-free food was provided



10. Organize a Green Team

KDY have 6-people on the sustainability team. The KDY Sustainability Team was present at all Race preparation meetings, and hence the 25 plus team of volunteers all took ownership and participated in the sustainability effort.

11. Ensure Proper Waste Bin Placement and Signage



The Skovshoved Harbour and the Gentofte Municipality have arranged waste collection / recycling stations, as pictured above, strategically positioned on the harbour site.

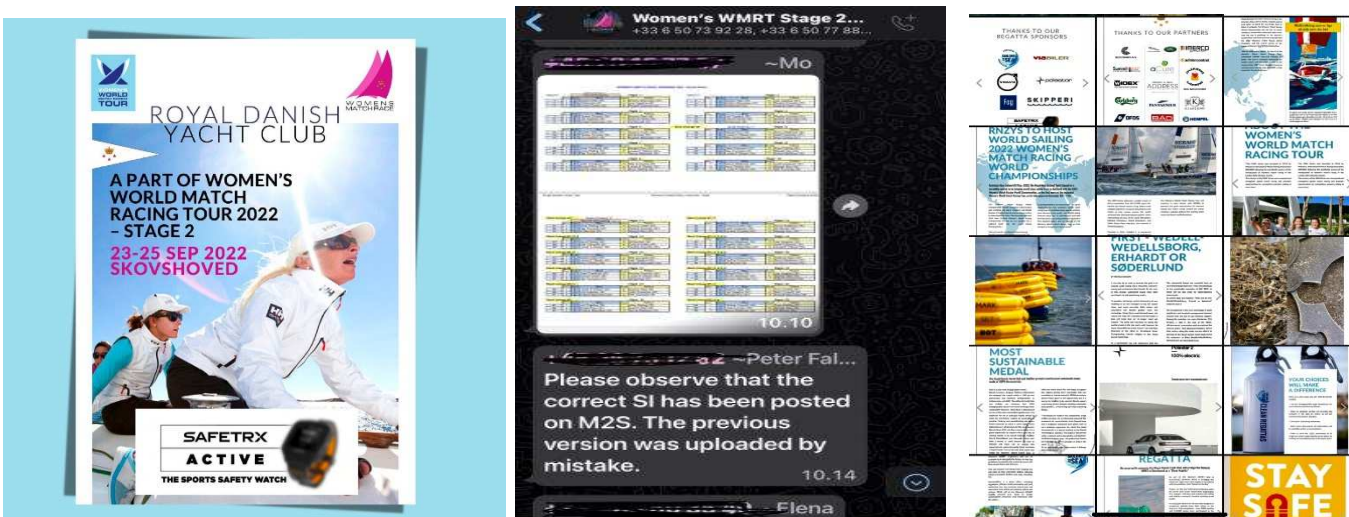


12. Divert Food Waste from the Landfill.

One race dinner was arranged during the Regatta and served at the local clubhouse in Skovshoved. Food was supplied from Chicago Roasthouse, a local restaurant with no food wasted.

13. Use Paperless Event Management

KDY managed the championship by the on-line system “Manage2Sail”, through which the participants could register, naming helmsman, crew and yacht club etc. The system also provided the event documents on-line as well as both the official notice board and the results. As well as WhatsApp was used for smaller announcements and questions from participants to Race Management before, under and after regatta.



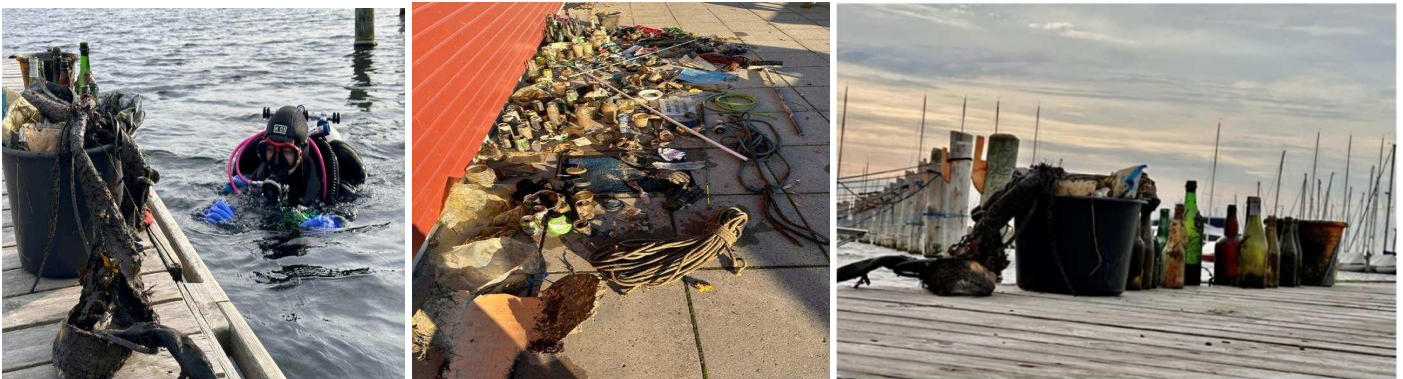


14. Host Beach or Marina Clean-up



A harbour clean-up was arranged both before and post regatta. The clean-up was arranged in collaboration with KDY volunteers as well as local divers from @underwaterambassador diver Helene-Julie Zofia Paamand and @Katrine_Larsen before and after the regatta.

September 1. and October 17. 2022 more than 50 kilos of non-biological materials were collected and taken away from the Skovshoved harbour water-basin.



Clean up on shore. Next to the KDY clubhouse, the Skovshoved Harbour and the KDY have placed a trash collection station with a sign asking the public to help keeping the harbour area clean both the water and ashore, while they take a walk on this beautiful harbour.

As shown on the photo, a couple of trash collecting toolsets are provided.



As part of the KDY sustainability activities and to ensure a cleaner harbour, KDY has invested in a DPOL.

The local shipping company, D/S Norden, have sponsored a second DPOL this summer, and a third DPOL is expected to be sponsored later in 2022. This is indeed a breakthrough and a direct result of the achievement following the Sailors for the Sea guidelines.



The DPOL was strategically installed in Skovshoved Harbour, cleaning the water surface of non-biological materials that are floating. DPOL are strategically placed in 'dead' corners, which there are in any harbour around the world. They are visible with KDY flags to other sailors and to the public visiting the harbour, cleaning the surface without any operator's use of time.

15. Promote Alternative Transportation

Denmark has a very efficient public transport system, which we stated to all participants and it was recommended they use bus or train, both being within walking distance from the harbour. Also "green" 100% electrical cars provided by sponsor and Danish Car dealer ViaBiler.dk (Volvo and Polestar) were available for the race management etc. As well as bicycles was provided



16. Increase Awareness of Wildlife and Habitat Protection

The DPOL has been an attraction and raised questions as to the effect of cleaning of the water in the harbour basin, and the positive effect on marine habitat. In addition, the local municipality has sheds at the harbour for Marine Habitat information. As well as clean up below water surface





17. Offer Vegetarian or Vegan Alternatives

Food made from local kitchen Chicago Roasthouse brought in warm boxes and washable plates, including vegetarian food (salads) and gluten free dishes. All sailors were able to choose vegetarian or vegan alternatives prior to the dinner and respective meals were delivered by Chicago Roasthouse.

18. Use Eco-Smart Race Management Techniques.

In the spring of 2022 KDY acquired four self-positioning floating marks with a view to limit the use of the fuel-intensive RIBs, lying at the starting line and across the racecourse and will adjust when a change of the racecourse is needed due to a turn of the wind direction. The marks have proved to be very effective in relation to conducting the races, but not the least since the number of RIBs needed has been reduced to a third, thus significantly increasing the level of sustainability of the entire event.



Launch of 100% Electric self-positioning sailing marks – MarkSetBot at Grade 1 MR regatta.

The committee boat towed all the MarkSetBot out to the race area. (Due to the Danish safety regulations MarkSetBot marks are considered non-skipped vessels, which is why the transport



needed to be done by a boat.) Upon arrival to the regatta area, each mark was linked via an app on a smartphone and instructed to sail to its specific position. The marks are equipped with an electric engine and a GPS-system, enabling marks to maintain the instructed position.

With the use of the new self-positioning and self-sailing marks, the need for support motor boats has been reduced to only one boat. However, for safety reasons, the rescue boats are still required.



The rescue boats were supplied by the Danish “Skipperi.dk” as part of a sponsorship. The Skipperi.dk boats were mounted with some of the world’s most efficient Ultra-low emission engines, and in addition, the boats were using the Aspen 4 “green fuel” during the regatta.

19. Prevent Toxins from Entering the Water.

Through the use of latest environmental underwater coating from the Danish manufacturer of marine paint Hempel, Silic One, is a biocide- and copper- free environmentally friendly primer for yachts, of a type that has been on large ships for many years.

20. Encourage Green Boating Practices.

Silic One was applied on the KDY DS37 Match Racing boats when season started in March. As well as the one vessel assisting with the regatta.

Prior to the ragatta all the participating DS37 boats were inspected by a diver to ensure that the underwater hulls were clean and all were approved.

The paint has been tested on, among other things, an Aphrodite 101 yacht, where the vegetation has been reduced, Various RIBs have also been tested with Silic One, where the product works optimally. Vegetation has a really hard time sticking to Silic One, as you can remove vegetation and roughen as easily as using a sponge, Hempel states.



Furthermore, to ensure the lowest possible impact while using engines, Aspen Alkylat gasoline was used. 99% cleaner gasoline than ordinary gasoline – virtually free from ethanol, aromatics and benzene, it is more expensive than ordinary, but for our environment and the ocean, Aspen was the only choice during this regatta.



BONUS OPPORTUNITIES ACHIEVED

Several of bonus opportunities have been incorporated in the 20 points presentation. Below are the listed key bonus opportunities.

- 1) Not a single boat or container was moved during KDY Women's Match Race.
- 2) Sailing Regatta medals made out of seaweed seagrass and corn from tomatoes, to make the medals water proof.
- 3) Seagrass and seaweed collected by DPOL during the 29'er Europeans and the local beach gathered from the DPOLs was used to produce the medals and also added are corns from tomatoes so the medals were 100% water-resistance.
- 4) SafeTRX SAR and track analyse Watch World premiere, made each sailor visible online.
- 5) MarkSetBot 100% electric self-sailing marks.
- 6) 100% recycle fabric long sleeves regatta clothes to all participants and volunteers made by Geysler.
- 7) 100% water base digital logo prints on regatta clothes and Sponsor Chart.
- 8) Local accommodations at Skovshoved Hotel and Charlottenlund Fort camping.



GENERAL REGATTA INFORMATION

12 of world's best women's Match Racing teams from five countries and two continents participated in the KDY Women's Match Race 2022

PARTICIPANTS
Registration for Women's Match Race - stage 2 is closed and following teams will participate

- Team Kattnakken
- Should've gone right
- Swedish Women's Match Racing Team
- APCC Women Sailing Team
- Team Otter
- Athena Racing
- Five by Five
- Costanzo
- Team Phoenix
- Team Louise
- WINGS
- Match in Pink by Normandy Elite Team

ROYAL DANISH YACHT CLUB





Welcome committee from the left:
Principal Regatta Officer, Royal Danish Yacht Club - Bjarne Patuel Nielsen

CEO and director World Match Racing Tour - James Pleasance,
Vice Chairman of Royal Danish Yacht Club – Anne Sofie Munk-Hansen,

CEO of Royal Danish Yacht Club - Anders Myralf.

Trophies was given in selected sizes for each skipper during prize ceremony with opportunity to grow in future.

A small trophy to all skippers, bigger trophies for podium and winner



All Photo credit: August Dahl



KDY Sustainability committee

2022