



CO2 EMISSION REPORT

FOR TRAVEL AT ICF 2021 EVENTS

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STARBOARD CEO

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ABOUT ICF & STARBOARD

A WORD FROM ICF PRESIDENT

"All over the world our canoeing family are constantly in contact with different ecosystems. They get to see first hand the pressures being placed on these environments.

They are passionate about protecting our waterways, and it is our responsibility as sporting leaders to lead by example. By partnering with leading climate activists like Starboard, we're in a unique position to make an impact.

We are already working to make our major events carbon neutral. This is just the first step.

We owe it to our athletes, and to future generations."

THOMAS KONIETZKO
ICF PRESIDENT



A WORD FROM STARBOARD CEO

"We paddlers value ecosystem more live than dead.

Can we make a positive impact on our own future by showcasing natural climate solutions, reforesting the planet, starting with the magic mangrove.

Thanks to the futuristic leadership at ICF, watersport can become an activating voice in environmental protection.

Next is perhaps to get all sports on board and turn the tide on deforestation to rather see reforestation as the trend.

How about a 10 x Climate Positive Paris 2024, creating a powerful environmental protection platform?"

SVEIN RASMUSSEN
CEO STARBOARD





ENVIRONMENTAL ACTION PARTNERS

In 2021, Starboard became the International Canoe Federation's (ICF) Environmental Action Partners to direct all World Championships and World Cups towards a more environmentally focus pathway.

Starboard's mission is to **'Bring inspiration and innovation to the world of wind and water'**. This partnership harnesses the power and meaningfulness behind Starboard's mission. Utilising the value of the blue playground valued by both parties.

The aim in the beginning of 2021 was to make the ICF SUP World Championships and it's travel 10 x climate positive. By calculating the carbon footprint of all travel and multiplying it by 10. From this total Starboard then work with the Worldview International Foundation to plant mangrove trees.

For each tonne of carbon dioxide released from the event, 1 mangrove will be planted. A mangrove tree will approximately absorb 1 tonne of Carbon Dioxide over the first 20 years of its life.

For all other World Championship and World Cups selected this year, Starboard planned to make the travel emissions of these events carbon neutral. However, due to a lack of responses this calculation was unable to continue. Instead, Starboard has calculated an average from similar events. Meaning, 1 tree will be planted for every 2 people.

8399

athletes, coaches, committee members, event staff & volunteers will have mangroves planted for them. Either neutralising their travel emissions or offsetting them 10 times over.

7687

mangrove trees planted with the Worldview International Foundation, Myanmar for the selected ICF World Championships in 2021.

LETS SEE HOW THIS IS BROKEN DOWN...

STARBOARD X ICF ENVIRONMENTAL ACTION PARTNERS

Together making the SUP World Championships Climate Positive. By harnessing the power of nature through mangrove planting. Absorbing the emissions of this event 10 times over!



2021 ICF SUP WORLD CHAMPIONSHIPS, HUNGARY

Starboard SUP expresses how simple it is to make the travel to and from sporting events 10 x carbon positive.

By working closely with the ICF team, we were able to gather enough results to effectively calculate the travel emissions and electricity emissions for this event.

With a total of 506 athletes and 528 staff, coaches, volunteers and media teams we have calculated travel for 1034 people. Our total calculations are based on responses from athletes and their teams. Data on air, road, rail and sea travel was collected and inputted into the Carbon Footprint calculator created by Carbon Footprint UK.

Once the calculations from these responses were complete we were able to create an average per person. This was then multiplied

by the number of athletes and staff to give the total of 399.38 tonnes CO₂ (including a 10% margin for error).

In addition, ICF event organisers shared with us the total KWH usage from electricity for the event site. A total of 3565 KWH were used, releasing 0.99 tonnes of CO₂.

For each tonne of CO₂ emitted by the events activities, 10 trees will be planted to absorb the equivalent CO₂ 10 times over.

For the 2022 events, ICF and Starboard will work together to collect responses from all attendees and therefore more accurately calculate the events total travel emissions. Further actions will also be implemented in regards to reducing waste, composting & sourcing lower impact materials for the event.

400.37

tonnes of CO2 calculated
from the travel emissions and
basic electricity of the 2021
ICF SUP World
Championships.

4004

mangrove trees will be
planted with the Worldview
International Foundation,
Myanmar for the 2021 SUP
World Championships.

STARBOARD X ICF ENVIRONMENTAL ACTION PARTNERS

Together making these events climate neutral.
By harnessing the power of nature through
mangrove planting.



FURTHER ICF EVENTS INCLUDED IN THE INITIATIVE

With the aim to leave no sport behind Starboard are also supporting the ICF to make the rest of their events carbon neutral.

In 2021, a selection of events were trialed in this initiative. In 2022, all events from all disciplines will be included.

A real challenge we found during this years calculations was the lack of responses we received about peoples travel information. This meant we had to go elsewhere to find the data required to complete the carbon footprint. In the end we used our past calculations from similar events to estimate the average CO2 per person. Our final estimation was an average of 0.5 tonnes CO2 emitted per person.

Resulting in a mangrove tree planted for every 2 people.

This method is not the most accurate representation of the events true travel emissions, However estimated CO2 emissions are still an effective way to account for, and ensure we offset, enough CO2 per person.

For 2022 ICF events, both parties will work to develop more effective methods for collecting travel details from all participants, athletes, staff, volunteers and onsite teams.

As with all our carbon offsetting initiatives, the required mangrove trees are planted with the Worldview International Foundation (WIF) in Myanmar,

Starboard and ICF share a vision to support other sporting disciplines in running similar carbon calculations for all events hosted.

1555

mangrove trees planted for
3109 people at a selection of
ICF White Water events in
2021.

5

White Water events covered.

Including;

2021 ICF Junior & U23 Canoe Slalom World Championships,
Ljubljana (SLO)

2021 ICF Canoe Slalom World Championships,
Bratislava (SVK)

2021 ICF Canoe Slalom World Cup,
La Seu (ESP)

2021 ICF Canoe Slalom World Cup,
Pau (ESP)

2021 Wildwater Canoeing World Championships,
Bratislava (SVK)

2128

mangrove trees planted for
4256 people at a selection of
ICF Flat Water events in 2021.

5

Flat Water events covered.

Including;

2021 ICF Canoe Ocean Racing World Championships,
Lanzarote (ESP)

2021 ICF Junior &U23 Canoe Sprint World Championships,
Montemor (POR)

2021 ICF Canoe Sprint World Championships,
Copenhagen (DEN)

2021 ICF Canoe Marathon World Championships,
Bascov (ROU)

2021 ICF Masters Canoe Marathon World Championships,
Bascov (ROU)

METHODOLOGY

ICF SUP WORLD CHAMPIONSHIPS

Athletes

As part of their registration, all athletes were asked to answer the following questions regarding their travel:

- Airport codes for full trip (if they flew);
- Total KM traveled over land; &
- Mode of transport used.

As over 90% of the 506 athletes responded, a reliable average was used for the 10% who did not respond.

All Other Individuals

This average was also used for the 528 individuals who made up the: Media, ICF, Staff, Volunteers and VIP attendees.

Electricity

The venue gave ICF the kWh from the temporary infrastructure at the event. In future events we aim to gather electricity data from all venues.

Further ICF EVENTS

Information gathering

In the other events we found that our standardised data collection methods were ineffective as every discipline works differently. This resulted in us not gathering enough feedback to calculate an average per person. For all future events, each individual will take part in a 30-60 second interview to gather all travel details effectively.

Average

Starboard looked back at the carbon footprint calculations for similar sporting events from previous years.

From this data we calculated an average of 0.5 tonnes of CO₂ per person. Which was agreed as a fair estimation for these events.

A total of 7365 athletes and 'Other Individuals' were accounted for in these calculations. To gain the final CO₂ emissions for these events we multiply 7365 by 0.5 to get 3682.5 tonnes.

Calculation

All findings were placed into the [Carbon Footprint UK calculator](#). The same company are those who verify Starboard's yearly carbon footprint. All emissions factors from the calculator are gained from the latest sources, including the UK government (gov.uk).

Margin of error

10% is included in the total to account for any inaccuracies from our estimations.

Mangrove Calculation

For every tonne of CO₂ emitted, 1 mangrove is planted as a tree will absorb approximately 1 tonne of CO₂ within the first 20 years of it's life.

10 X Carbon Positive (ICF SUP WORLD CHAMPIONSHIPS)

To make the ICF SUP World Championship event 10 times carbon positive we plant 10 trees per tonne of CO₂ instead of 1. This allows nature to sequester 10 times the amount of CO₂ emitted from the events basic electricity and travel.

WHY MANGROVES?

Mangroves help the planet thrive in many ways!

In the last few decades huge areas of mangrove forest have been slashed down for salt or shrimp farming or to be used as coal to fuel fires. With this rapid depletion comes many issues:

- The huge quantities of carbon stored by the mangroves is released into the atmosphere.
- No plants are left to photosynthesise and draw down atmospheric carbon.
- Native wildlife will either face extinction or be forced into closer contact with humans.
- Biodiversity will be severely reduced
- Removal of this natural sea defense will expose the land to soil erosion and local communities to the direct impact of extreme weather events.

Protecting the surviving forests will help to prevent these issues, but protection alone is not enough. If we do not support the reforestation of mangroves we will have to face the consequences globally.

The planets carbon cycle is the exchange of where the carbon dioxide is stored. Carbon is normally stored in carbon sinks in the ground. CO₂ is released from the carbon stores in the ground or under the ocean through the change of land or the burning of fossil fuels.

Once this CO₂ is released it goes into the atmosphere, increasing levels of atmospheric carbon and adding to the greenhouse gases which are now warming our planet and acidifying our oceans.

The fastest way to restore carbon is through plant photosynthesis, where plants remove carbon from the air, store it in their trunks, roots and leaves and eventually sink it into the ground. photosynthesis also releases oxygen back into the atmosphere. Additionally, mangroves live in oxygen poor soils which means they work even harder to process the surrounding CO₂.

Worldview International Foundation have the highest survival rate for trees, whilst also supporting the local community by creating jobs that provides a good income for planting and protecting the mangroves forests.



ABOUT ICF

The ICF is the head organization of all national canoe organizations worldwide, administering all aspects of canoe sport worldwide. More than 165 national canoe organizations are affiliated with the ICF. As the head organization, the ICF organizes more than 20 worldwide ICF World Cups and World Championships per year in different Canoe disciplines. Including, but not limited to, Canoe Sprint, Paracanoe, Canoe Slalom, Canoe Polo, Canoe Marathon, Canoe Freestyle, Wildwater Canoeing, Ocean Racing, Dragon Boat Racing and Stand up Paddling.

The ICF is also connected to the worldwide Paddling Community, including many thousands of recreational canoeists

ABOUT STARBOARD

Since 1994 Starboard has been an industry leader. Championing in innovation and quality in Windsurfing and Stand Up Paddle Boarding. Whilst, always striving to be the best in the world. Building upon this, the vision is to become the best FOR the world.

Starboard has pledged to be an advocate for the planet. Encouraging, all stakeholders to practice environmentally friendly attitude. Whilst, inspiring others through projects that protect the big blue playground for future generations to come.