RACE FOR WATER ODYSSEY 2017-2021

A pioneering vessel, a crucial mission for the oceans



Race for Water

Continuing its commitment with a 5-year expedition around the world dedicated to science and energy transition, using the ocean, the sun and the wind as its sole sources of energy.

Goals Conduct scientific studies supporting the preservation of our oceans

Act, raise awareness and promote new solutions to fight plastic pollution in the oceans

Promote "Clean-Tech" innovations

Limitless energy

RACE FOR W. TER

RACEFORMITE

A UNIQUE CIRCUMNAVIGATION WITH A PIONEERING 100% ENERGY SELF-SUFFICIENT VESSEL



Race For Water is the first demo vessel in the world using only clean and renewable energy at all times for her propulsion and life on-board.

By day as well as by night, Race for Water is **optimised** and autonomous thanks to solar energy coupled with the production of hydrogen.

Energy independence onshore and at sea 365 days a year

Break free from fossil fuels

Promoting the potential of hydrogen technologies in the maritime industry



THE WIND, THE SUN AND THE OCEAN RACE FOR WATER POWER SOURCES

OR W TER

250 to 400m high

RACE FOR WITE



Length: 35m Width: 23m Height: 6.3m

Average Speed: 5kts Maximum Speed: 9kts

4 to 5 crew While sailing: up to 20 passengers (inc. crew) When docked: 70 passengers

A high-altitude towing kite

Race for Water and the company Skysails are developing a next generation towing kite (40m² of surface area at an altitude of 300m represents the equivalent of 500m² of sails while at sea i.e. the equivalent of 200kW of propulsion). An innovative and effective solution, entirely managed by an automatic pilot, enabling the vessel to double her speed in certain conditions as well as providing greater autonomy.

Hydrogen Power System on board

Race for Water and the company Swiss Hydrogen S.A. are installing a hydrogen production unit: 25 hydrogen bottles at 350 bar storing close to 200kg of hydrogen which can be converted into more than 2800kWh of electricity i.e. 4 times the electricity storage contained in the batteries (745kWh).

Thanks to the hydrogen system the vessel will have 6 extra days of autonomy at a speed of 5 knots.

Hydrogen Storage: 25 tanks delivering up to 2800kWh of electricity





2 x 30kW fuel cells 2 x 5kW electrolyser

Propulsion:
2 x 60kW electric engines

Solar Energy: 500m² of Solar Panel

Solar Energy Storage:
4 Lithium ion batteries delivering 754kWh

RACE FOR WATER, A REVOLUTIONNARY HYBRID SOLUTION COUPLING SOLAR ENERGY WITH HYDROGEN



RACE FOR

It is futile to imagine that we can "clean the oceans". We must take a proactive approach, and act on land to avoid rubbish from reaching the oceans.

Marco Simeoni Chairman of the Race for Water Foundation

In 2015, on the MOD70 Race for Water racing trimaran, the Foundation conducted a scientific assessment of the extent of plastic pollution.

For the first time, our team gathered the scientific and sociological data essential for a thorough understanding of the impact of plastic pollution in the 5 zones in the oceans where waste accumulates.

The conclusion is clear: a grand-scale clean-up of the ocean is unrealistic.

The mission of the Foundation is to identify, promote and implement solutions on land that give waste plastic a value.

The goal is to preserve water as well as have a positive impact on local communities.



CONVICTIONS WITH A TOUCH OF OPTIMISM FOR A POSITIVE FUTURE

Our field of action is worldwide

Carried by the currents, waste is mobile, so we must deliver solutions on an international scale.

Only a multi-disciplinary team can define an effective plan of action

There is not just one problem that needs to be solved by one expert; the causes and effects need to be addressed by a multidisciplinary team.

The technologies we need already exist

We are going through a period of multiple technological leaps. There have never been as many inventions as there are today. This acceleration should give us confidence in our capability to act positively for our planet.

RACE FOR W TER



The Race for Water Odyssey represents a living positive future



OUR EXPERIENCE GAVE BIRTH TO REAL SOLUTIONS

Waste is the problem AND the solution.

There does not have to be a conflict between recycling and economic growth.

Waste has value. Collecting it gives an income to many people around the world, from the biggest cities to the smallest islands.

The Race for Water operating model is to implement relevant technologies to process plastic waste without the sorting or cleaning normally required for the value chain to be profitable.

We have known this is urgent...for a long time.

We must not let it become inevitable.

Let's act now and together









RACE FOR WATER

2010

No one can ignore what is threatening our most precious resource: water

2017

No one can ignore that rational and cost-effective solutions can be implemented to preserve water...

2025

...by helping us stop the flow of plastic waste entering the oceans.



A worldwide expedition dedicated to the oceans



To be where media coverage is greatest Reach a large audience Attend events with a global reach

Take action in the most relevant areas for scientific research

PROVISIONAL ROUTE RACE FOR WATER ODYSSEY



A CIRCUMNAVIGATION AT THE HEART OF MAJOR EVENTS, SERVING SCIENTIFIC RESEARCH

Bermuda, Tokyo, Dubai...

A strong on-site presence during major events: America's Cup in Hamilton, Bermuda Olympic Games in Tokyo, Japan Universal Exhibition in Dubai – United Arab Emirates

As well as at the heart of the seas and oceans

Allowing researchers to conduct scientific studies in optimal conditions with no impact on the environment: Caribbean Sea, Gulf of Mexico, Gulf of California, Sargasso Sea, South China Sea, Gulf of Oman, Red Sea, Mediterranean Sea...







THE RACE FOR WATER AMBASSADOR VESSEL PRIORITY ON RESEARCHING THE IMPACT OF PLASTIC POLLUTION



Support the scientific community in gaining a better knowledge of macro and micro plastics in the oceans

Plastic pollution quantification

Sources, routes and destiny of plastics in the oceans

Plastic pollution impacts on ecosystems

Transfer of non-native species and biofilms; relationship and interactions with pathogens; physical condition of key marine habitats; climate change influence

Plastic degradation and toxicity

Chemicals (UV resistance, flame retarding treatments etc.); physical and biological stress; absorption of persistent pollutants

Ecotoxicological effect of micro plastics on food chain and human health

Absorption, tissue distribution and fate of ingested micro plastics by representative marine organisms; Persistent pollutant accumulation and transfer through the food chain Potential toxicological effects of plastic on species and population level impacts





Supporting Scientific bodies/Universities

A wet laboratory and dry laboratory:

2 direct access points to the water from the rear of the vessel.

More than 90m² of working space (modular), with wifi and satellite transmission + ultra fast laptops equipped with voice and optical character recognition software.

Mobilising the general public

International conferences Exhibitions Visits by the general public and schools Television studio

Welcoming partners

Cocktails and receptions Navigation Work meetings







RACE FOF





A strategy based on social entrepreneurship with tangible results thanks to the technology developed by ETIA, an industrial partner of the Race for Water Foundation.



STOP PLASTIC POLLUTION

- Stop the flow of waste in the streets, in nature and in our oceans
- Protect thousands of species (including humans) from death, illness or injuries
- Preserve zooplankton which produces half our oxygen



- Create jobs for thousands of waste collectors to gather plastic waste in the streets
- Provide a better quality of life and health improvement for the most vulnerable communities
- Educate people to change behaviour and enhance environmental awareness



- Provide a cleaner and sustainable source of energy

RACE FOR

- Apply a long-term model which stimulates local economies (tourism, fishery)
- Reduce expenditure for local authorities (health, pollution clean-ups)

FIRM GOALS AT EVERY STEP ACT AND IMPACT ON BROAD AUDIENCES



We organise conferences at the time of international meetings to make an impact:

COP 21

Presence of the Race for Water solar vessel, symbolically bringing the oceans to the COP 21 *R4WF is a new member of the Ocean and Climate Platform (OCP)*

Universal Expo 2015 in Milan

On the theme of "Nourish the planet, energy for life" Artistic and educational exhibition on plastic pollution

United Nations in New York in 2015

Participation at two conferences organised by the UNEP (United Nations Environment Programme) on the issue of plastic waste



M. Simeoni with Albert II, Prince of Monaco



COP 21



E. Doerig, Swiss Ambassador to Chile, R. Branson and M. Simeoni



And many more to come in Bermuda, Tokyo and Dubai

We organise exhibitions on board the vessel to share our work:

"Plastic pollution in the water: impacts and solutions"

The foundation has developed educational programmes and invites schools on board to raise awareness among the next generation:

The cartoon character, Titeuf, helps teach children how to preserve one of the most precious resource on the planet: water. The awareness programme is used in Swiss and French Schools.

The Foundation has also developed educational materials to raise awareness among younger generations:

- Educational kit in English, French and Spanish
- eBook in French and English
- Race for Water snakes and ladders game
- Race for Water quiz





"It's a race against time for future generations... If nothing is done, by 2050 there will be more plastic than fish in the oceans."

Marco Simeoni (July 2016) Chairman of the Race for Water Foundation



Marco SIMEONI

Founder and Chairman of the Race for Water Foundation

An entrepreneur at heart, Marco Simeoni built and developed many companies before founding the highly successful Swiss SME, Veltigroup, in 2008. Concerned about the environment, Marco Simeoni created the Race For Water Foundation in 2010, with the aim of informing, sharing and acting on the preservation of water, and oceans in particular. Following the sale of Veltigroup in 2014, he decided to devote himself entirely to his Foundation and bring his entrepreneurial spirit to the cause of the environment. In 2015, he personally participated in the Race for Water Odyssey. On his return, after nine months at sea on board the trimaran "MOD70 Race for Water", his message is clear: plastic waste is everywhere, it is unrealistic to think about cleaning up the oceans. We have to act guickly on land and process plastic waste before it reaches the water. The new mission of the Foundation was born: to identify, promote and implement plastic waste recovery solutions.

A multi-skilled committed team... A common vision for the future

Complementarity, strong beliefs, experiences and expertise dedicated to one goal: take concrete action to preserve the oceans from plastic pollution.

Fondation Board



Francis WALDVOGEL

Advisory Board



Franklin SERVAN-SCHREIBER



Toni FRISCH



Philippe SARASIN



Gilles ROBERT-NICOUD

Jean-Laurent BOURQUIN



Angela DE WOLFF



TO PRESERVE

Alain NICOD



Alexandre CLOSSET





Race for Water serves as an incubator to stimulate and co-finance - with partners and donors - long-term solutions to preserve the oceans from plastic waste.

Create and activate multidisciplinary teams

Connect research and implementation of tangible solutions

Communicate to have an impact on target audiences

Win this race for water with us Every drop counts Time to dive in!

THEY LIFT OUR CAUSE THROUGH THEIR FEATS



Since 2010, we have built a network of ambassadors who are spreading the word and campaigning the oceans:



Tony ESTANGUET Member of the IOC Three-time Olympic kayak champion Patron of the Race for Water vessel



Éric LOIZEAU Sailor and mountaineer Former record holder of the Solo Atlantic crossing Climbed Everest (2003)



Manu BOUVET and Carine CAMBOULIVES Riders and eco-explorers



Claude THÉLIER French sailor Multiple winner of the Tour de Guadeloupe



Prestigious partner institutions







Virginie FAIVRE Three-time half-pipe

French Sailor

French Sailor

Michel DESJOYEAUX

(2000-2001 and 2008-2009)

Gérard d'ABOVILLE

Race for Water vessel captain

Twice winner of the Vendée Globe



Aurélien DUCROZ Freerider and skipper Twice freeride ski world champion



Anne RICHARD Franco-Swiss actress, author



Loïc FORRESTIER Swiss sailor - Bol d'Or winner



ZEP Creator of Titeuf



Nicolas ROLAZ Optimist world champion



Piru HUKE (MAMA PIRU) Pioneer and leader of environmental actions on Easter Island

The Water Guardian

More than 16,000 fans on Facebook

Become a partner of the Race for Water Odyssey Main Partner – Official Partner – Supporting Partner

Support the Race for Water Odyssey Join the donors community

Benefit from a unique and worldwide scientific platform

A platform dedicated to research for universities and major international scientific bodies





www.raceforwater.org

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