

2020

ACTIVITY REPORT

THE SEACLEANERS

2020



www.theseacleaners.org

The organization in 2020

Because the ocean is a common good for all people, it is our collective responsibility to preserve and restore it. The SeaCleaners acts with the conviction that only a global, concrete and complete approach to plastic pollution will allow an awakening of consciences and a radical evolution of uses.

OUR DREAM

The SeaCleaners' dream is of a world in which the oceans, drastically cleaned up, will have regained their original beauty and the integrity of their functions, which are essential to the planetary balance. Humanity and biodiversity depend on it.

WHO WE ARE?

The SeaCleaners is an association under the French Law of 1901, recognised as being of general interest, non-profit and exclusively privately funded. It was created in 2016 by the French-Swiss skipper Yvan Bourgnon.



OUR MISSION

Faced with a certain inertia in national and international public policies and the accelerating production and consumption of plastic, The SeaCleaners has chosen a proactive and pragmatic approach, centred on action and doing, consisting of "demonstrating in order to convince and multiplying actions on a large scale".

- By helping to clean up the oceans and aquatic environments and recycling plastic waste.
- By understanding plastic pollution, while developing and disseminating scientific knowledge.
- By raising awareness and mobilising all sections of the public to raise awareness and bring about lasting changes in behaviour.
- Ensuring optimum management of ocean waste and promoting a local circular economy.

GOVERNANCE AND FUNCTIONING OF THE ASSOCIATION

The association's day-to-day bookkeeping is carried out in-house, while the preparation of the annual accounts and the balance sheet are outsourced to Audiceco, a chartered accountancy firm based in Vannes. The audit of the annual accounts and the specific verification of the accounts required by law are carried out by Cabinet Collet & Associés, Statutory Auditors in Ploemeur.

To date, The SeaCleaners team is composed as follows:



Managing Director:

Jean-François MIELCARECK



Chairman:

Yvan BOURGNON



Accountant:

Mireille FIXON



DEVELOPMENT AND PARTNERSHIP DEPARTMENT:

Marketing and Development Director:

David TAIEB

Partnership Manager:

Caroline RESMOND

Corporate Partners Relations Manager:

Bénédicte HAMON

Corporate Partnership Development

Managers for France: Nathalie

LOUSSOUARN (5-month assignment),

Bérengère de BUCHY (5-month assignment),

France SOUQUES, Coralie GRUNDELER

International Patronage Development

Managers: Ms Laure VIENNOT-TRONCHE, Ms

Sophie THOMASSET.



AWARENESS AND ACTION DEPARTMENT

Head of Unit:

Claire MANNEVILLE

Environmental Awareness

Coordinator:

Thémis VERNHES



SCIENTIFIC DEPARTMENT:

Scientific Director:

Yannick LERAT



VOLUNTEERING DEPARTMENT:

Head of the Unit:

Romain SORLIN



COMMUNICATION DEPARTMENT:

Communications Director:

Valérie AMANT

International Communications Manager:

Élise d'ÉPENOUX

Digital Communications Manager:

Anne LORIOT

Events Manager:

Nolwenn BROHAN

Heads of Communications, Graphic Design

and Web Development: Séverine COTTIN,

Tiphaine LEVRIER

Content Manager and Editorial Managers:

Antoine Rodat and Clara Farcy



TECHNICAL DEPARTMENT:

Technical Director:

Frédéric SILVERT (Manta Innovation)

Operational and Scientific Manager:

Éric LE PLOMB (Manta Innovation)

Project Manager:

Thierry PACINI

Circular Economy Project Manager:

Alice DARONDEAU (Manta Innovation)

Circular Economy Project Manager:

Mme Cécile LAVAL

The MANTA project in 2020



The mission of MANTA Innovation, The SeaCleaners' integrated design office, is to help clean up plastic pollution in the oceans while developing innovative technological solutions.

Design of the MANTA multihull, naval architecture and design

This year, Concept Design work was carried out with our naval architect SHIP-ST to fix the General Arrangement and Design of the Manta. Detailed hydrodynamic studies were carried out in parallel with GREENFLOW to define the hulls, bulbs and appendages. Once the overall plans for MANTA had been finalised, other important naval architecture documents were completed. Studies of the principle of the ventilation and air conditioning system were also carried out with the company PAUMIER and the ship's design was refined and fixed with DEMS.

Sailing propulsion: study of Turborig automated rigs

With regard to the development of automated rigging for the MANTA, the year 2020 ended with a large number of results obtained with our suppliers MAGMA STRUCTURE / SOUTHERN SPARS and GREENFLOW and the end of the tests carried out on two 1:6th scale prototypes of the Turborigs.

Collector mats

In 2020, static and dynamic tests of different types of mats on the "CleanersLab" prototype built with EPC enabled us to identify avenues for developing an effective waste collection system using mats. In 2020, we set up a multi-skilled collaboration with the company ALTRAN for the dimensioning and integration of the various ancillary systems, the company TURBE for the construction of the chassis and the dimensioning of the motorisations, and finally the company INTRALOX for the selection and integration of the modular belts for the mats. We are also relying on the expertise of TECHNIP-FMC for the operation and design of the systems in a marine environment.

Surface collection system

In 2020, MANTA Innovation worked with PAYOTE CONSEILS to design a low-drag surface waste collection system. This was followed by the manufacture and sea trials of 1/4-scale prototypes, tested with different mesh sizes and opening systems. The collection system opening solution is currently being selected and trials will be carried out in 2021 on the new solutions identified.

Waste sorting and preparation plant

The main contributor to the design studies for the plant, which includes conveyors, a sorting table, a shredder and a dryer, is our partner MTB. Thanks to these studies, the waste treatment plant was integrated into MANTA in 2020. The next stage in 2021 will be the final sizing of the facilities and selection of the equipment.

Waste-to-energy conversion unit for MANTA

This year, a large number of tests and studies enabled progress to be made on drawing up specifications and selecting technologies and service providers. The main tests were carried out with the help of the French Atomic Energy Commission (CEA) for chlorine trapping and with our service providers for characterising syngas and energy production. We selected in 2020 our systems for converting waste into energy and producing electricity and heat.

Development of renewable energy production systems and the energy management system on board MANTA

In 2020, much of this work involved monitoring existing systems and making contact with a number of potential equipment suppliers. For studies on the selection, sizing and integration of photovoltaic panels, we launched a detailed integration study with EMERAUDE SOLAIRE as our partner. In addition to the selection and integration of the energy production equipment, we are also carrying out a detailed study of the energy management system on board the MANTA.

MOBULA study

In 2020, the search for pollution clean-up solutions using small multi-purpose collection boats led to the signing of a partnership agreement with the Breton shipyard, EFINOR SEA CLEANER, and the arrival of the Institut de Recherche pour le Développement to provide scientific support and contacts with pollution clean-up operators in South-East Asia. The culmination of this work is the launch at the end of 2020 of the construction of an 8-metre MOBULA incorporating the selected systems.

Funding applications have been prepared for deployment in South-East Asia.



Life Cycle Analysis (LCA) and technical-economic study of circular economy loops

A complete life cycle analysis study was carried out with OBEO and ALTRAN in 2020. It was the cornerstone of the choices that enabled us to improve the design and operation of MANTA, in particular to minimise its energy consumption and environmental impact. The MOBULAs were also the subject of an LCA study and a technical and economic analysis. The results were used to determine the number of collection boats and to size the facilities so that the waste collected could be recycled in a way that was beneficial to the environment and economically self-sufficient.

→ **To date, the MANTA project has required 5,100 internal hours and 9,000 external hours of work.**

The cost of MANTA project-related actions

The sum of **2,056,233 euros** (two million fifty-six thousand and two hundred and thirty-three euros) was raised and paid for the following actions:

Outsourced technical studies for the MANTA project	€918,672
Awareness-raising/educational activities	€5,426
Communications activities in France	€78,190
Communications activities abroad	€113,749
Fund-raising initiatives	€86,244
Commissions on banking services/fund transfers	€14,531
Purchases of goods from the TSC shop	€8,241
Other external purchases and expenses (rent, utility vehicles, chartered accountant....)	€251,892
Taxes	€47,028
Depreciation, amortisation and impairment	€23,050
Salaries and social security charges	€873,761

Financial overview of the activity in 2020

RESULT FOR THE FINANCIAL YEAR 2020 AND OPERATING COSTS (FOR THE PERIOD FROM 01/01/2020 TO 31/12/2020)

Total balance sheet net assets	+ €2,353 814
Operating income	+ €2,056 233
Operating expenses	€2,420 784
Operating loss	- €364 551

DONATIONS RECEIVED FOR THE PERIOD 01/01/2020 TO 31/12/2020

Direct donations	€80,251 (online donations) + €37,284 (direct donations) = €117,535
Donations from corporate sponsors	€1,871,264

Support and partnership and international development

The corporate partners of The SeaCleaners support the association every day in the development of its ocean protection missions.

CORPORATE PARTNERS

Several companies have already joined The SeaCleaners adventure.

They are linked to the project by a sponsorship agreement that commits them to supporting the association for up to 5 years.

To date, they include:

ADEXGROUP, ALLIANZ GI, ALUMAINE, AUBRYTECH, BALZEO, BIGBEN CONNECTED, BOOST-AIR, BRANGEON Services, BRUNEL, DICKSON CONSTANT, EcoDDS, ED TRANS, ELCIA, ELEVEN STRATEGY, ESKENAZI SA, EXTERNATIC ATLANTIQUE, ETYO REAL ESTATE, FOKUS, Groupe BARBIER, INNAX, JUNE PARTNERS, LEONOR GREYL, MARIGNY CAPITAL, MAISONS DRÉAN, Les Salines de Guérande, MTB MANUFACTURING, MTB RECYCLING, OBÉO, OSALIA, PILOT PEN France, PROCAL, RAMSES Keystone, ROQUIGNY, SOCAPS FUND, SUNSAIL The MOORING, TARIFHOLD, TECHNIP FMC, W2P DIGITAL.

Despite the crisis at Covid-19, there has been no defection of corporate sponsors committed over several years.

In addition, twelve new companies came to support us in 2020. However, the pandemic made it difficult to raise funds from companies this year.

SPONSORSHIP IN KIND AND SKILLS IN 2020

This year, the association benefited from sponsorship in kind and skills from the following companies:

✓ Duo Display

Production of a range of demountable stands and other visual marketing products for the association's presence at events. Services and delivery of the items valued at **€2,805**.

✓ MTB Group

Research and development on the entire waste sorting unit on board the Manta, on an energy conversion system for processing the plastics collected, on a system for converting gases into electrical energy and on fume treatment. Sponsorship of skills valued at **€88,694**.

✓ Air Liquide

Provision of a full-time project manager to develop the project.

✓ W2P DIGITAL

Overhaul of the ASSOCIATION's website and putting it online. Sponsorship of skills valued at **€1,960**.

✓ TECHNIP FMC

Research and development on the WECU waste-to-energy units and the SCOMER / NAVTRA waste collection system at sea. Sponsorship of skills valued at **€55,000**.

✓ EMERAUDE SOLAIRE

Carrying out the detailed design study for the Manta photovoltaic power plant and defining its interfaces with the Manta's main shipbuilding package. Sponsorship of skills valued at **€3,840**.

✓ TERRE MAJEURE

PR services for France and foreign press correspondents for the MANTA project. Sponsorship of skills valued at **€4,875**.

✓ MATCH EVENT

Provision of sound, lighting, technical and audiovisual equipment, etc. and qualified staff for the association's New Year's Eve party. Sponsorship of skills valued at **€4,260**.

✓ JIN

Assistance with the campaign to unveil the new MANTA. Support for digital influence, support on social networks with content creation. Skills sponsorship worth **€2,430**.

✓ MCI

Contribution to the organisation of the association's New Year's Eve party by providing a Project Manager, liaising with service providers and coordinating the various events. Sponsorship of skills valued at **€3,300**.

✓ Jacques Frelin Vignobles

Jacques Frelin Vignobles: Provision of organic wines for the association's New Year's Eve party and sponsorship events. Sponsorship of skills valued at **€819**.

INTERNATIONAL DEVELOPMENT

The Operational Department was created this year. Its aim is to set up actions on the ground in the countries most affected by ocean plastic pollution.

The first country to be targeted is Indonesia, where The SeaCleaners branch will be set up in 2021 to carry out the association's four missions.

The Volunteering Department

The Volunteering Department leads and coordinates The SeaCleaners volunteer network in France. An international network is planned for 2021.



The Volunteering Department has been expanded this year and now comprises eight regions. In each of these regions, a Regional Delegate (RD) has been appointed and trained. Each RD then set up a regional team.

At the end of 2020, 785 volunteers were involved with The SeaCleaners.

The creation of the Volunteer Centre has enabled the development of a network of 70 active volunteers in different regions of France. They have been trained in field observation and event organisation. In just a few months, 350 new volunteers signed up on the platform created for this purpose on the association's website. The Volunteering Department is now developing its action plan, with plans to open international volunteer networks in 2021.

During the summer of 2020, three training courses for regional volunteer delegates were organised. The modules covered presentations of the Awareness & Action division, events and training on the collection guide. A total of 35 volunteers were trained.

Awareness-raising activities

The SeaCleaners is taking action against plastic pollution in both corrective and preventive ways, in particular by educating and raising awareness among the general public, in order to raise awareness and bring about lasting changes in behaviour.

TRADE SHOWS AND EVENTS

This year, the association was present at 7 trade shows and targeted events:

- Salon de la Plongée in Paris from 10 to 13 January: **370 people reached.**
- Boot Düsseldorf from 18 to 26 January: **400 people reached.**
- Summer Collect (litter collection) in Hyères on 19 July.
- Summer Collect (litter collection) in La Trinité-sur-Mer on 1 August.
- Summer Collect (litter collection) in Lacanau on 14 August: 106 people reached.
- WCUD 19 September: 31 collections - 2,242 participants - 24,305.8 kilos of rubbish and 172,211 cigarette butts collected.
- Vendée Globe in Les Sables d'Olonne from 17 to 28 October: 378 people involved.

The health situation has greatly disrupted the organisation of events in 2020. Many have been cancelled.

RAISING AWARENESS AMONG SCHOOLCHILDREN, EXTRA-CURRICULAR ACTIVITIES AND OTHER AUDIENCES

In schools:

The health situation and the two lockdowns have forced us to cancel all the events and activities planned for schools in 2020.

Extra-curricular activities:

183 people received information.

- Scout camp in Carnac on 21 July 2020: **20 young people aged 14 to 18.**
- Children Camp Summer Village (CISV) : WE in Préfaillies on 12 and 13 September: **40 young people aged 11 to 20.**
- Leisure centres in Les Sables d'Olonne on 20, 23 and 28 October 2020: **123 people reached.**

Some after-school programmes have been cancelled due to the health situation.

Estimated total number of people reached in 2020: 3,332.



DESIGN OF AWARENESS-RAISING TOOLS AND KITS

For corporate partners:

The Corporate Partners ToolKit was sent digitally to patrons on 8 June and presented at the first Corporate Partners Club on 9 July.

For schoolchildren:

- Co-creation with our sponsor Pilot Pen France of an 8-page special edition of "Mon quotidien" on ocean plastic pollution, published at the end of May 2020.
- Work on an educational kit as part of the Union Nationale des Footballeurs Professionnels (UNFP)/Players for Society campaign, aimed at pupils in the 6th and 5th grades, comprising 6 digital teaching modules: to be delivered at the end of August 2020.
- Miscellaneous: poster "Why protect the ocean?", digital animation "Who eats whom?", visual recognition game "Funny fish", card game "Plastic on our plates", animated debate "Alternatives to plastic and eco-gestures".

For the "aquarium" public

- Design and testing of the giant XXL game "Mantawa".
- Escape game "Une bouteille à la Terre" ("A bottle on Earth")
- Game of the 7 families of plastics
- Quiz for interactive terminals
- Talks on the circular economy, alternatives to plastics and eco-actions.

For events:

A catalogue of activities for event organisers is currently being drawn up.

For volunteers:

- Clean & Action collection guide.
- Project to train volunteers to run events, design of a training programme.

The Scientific Department

The scientific department acts as a link between activities in the field and the international scientific communities working on the issue of plastic waste. It also meets the association's need to base its projects on verified and scientifically validated knowledge.

AN INTERNATIONAL SCIENTIFIC ADVISORY BOARD IS ESTABLISHED

Actions have been taken to bring together national and international institutions and scientific experts. The aim of these initiatives is to gain a deeper understanding of the problem of plastic waste in the oceans and to identify possible solutions to combat this pollution.

An International Scientific Advisory Board was set up in 2020. Thirteen conventions have been signed, with eleven members + two observers.

Five countries are represented:

France, Australia, New Zealand, USA, Indonesia.

Four continents:

Europe, Oceania, Asia, Americas.

Members with varied expertise:

Physical oceanography, biology, chemistry, economics, circular economy.

The launch seminar was held by teleconference in November 2020. **The members of the Scientific Advisory Board are, to date:**

- Claire Dufau : CLS-Group, Toulouse, France, expert in current modeling of remote sensing data
- François Galgani : IFREMER, France, expert in marine plastic pollution and networking with global organizations related to plastic pollution.
- René Garello : IMT-Atlantique, Brest, France, expert in signal processing, remote sensing
- Bernard Gindroz : BMGI, consulting, France, expert in circular economy, eco-design, public policy
- Denise Britta Hardesty : CSIRO, Australia, Biologist, ecologist, in marine plastic pollution
- Jean leBideau : IMN Jean Rouxel, Nantes University, France, expert in material science and vibrational spectroscopy
- Laurent LeBreton : The OceanCleanUp Foundation, Netherland, expert in marine plastic pollution modeling
- Christophe Maes : IRD, France, Brest, Oceanography, modeling
- Umi Muawanah : Min. of Maritime Affairs and Fisheries, Indonesia, Economist
- Jean-François Sassi, CEA- Cadarache, France, expert in polymer chemistry, bio-polymers, fine chemistry

The Scientific Advisory Board observers are, to date:

- Odeline Brillant : IFREMER, France, All-Atlantic Ocean Youth Ambassador, EU
- Isabelle Poitou, MER-TERRE, France, Président of the association



THE DEPARTMENT'S ACTIONS

The Scientific department provides the general public with up-to-date information on plastic pollution, biodiversity, impacts, etc. via The SeaCleaners' communications.

In this context, Yannick Lerat, Scientific Director, has carried out the following actions:

- Scientific watch (profiles on the Web Of Science) and dissemination via the Newsletter, social networks, etc.
- Archiving references and documents
- Sharing scientific and technical knowledge: Training courses (internal + volunteers) on plastics, their uses, their degradation, marine pollution, etc, as well as publications on the association's website and social networks of opinions and/or detailed opinions on an article or scientific subject, content for the creation of infographics for social networks and sponsors and support for the association's projects and communication.

FIELD OPERATIONS

Actions in the field have been suspended due to the international health situation.

EXPLORATORY CAMPAIGNS PRIOR TO DATA COLLECTION CAMPAIGNS

Supporting the Technical Department in preparing MANTA missions, contributing to the selection of geographical areas for waste collection, collecting data on densities and types of floating plastic waste, compiling the TSC database: 3,500 entries.

International data

Focus on Indonesia (new priority choice)

- Contribution of the Technical Unit to data collection
- Contribution to observation protocols
- Contribution to the Indonesia scientific network

Specific scientific and technical studies

in-house

- On the technological building blocks needed for the Manta missions
- Characterisation of floating plastic debris deposits
- GIS mapping
- Installation and training in ArcGis Desktop and ArcGis Online
- Map of global geo-referenced bibliographic data
- Indonesia-specific data map

External

- Development of a network of scientific contacts
- Hakathons and student projects: IMT (Ecole des Mines) Nantes - PlastiBot, Chatbot (conversation robot) on plastic pollution knowledge base and Manta project, CapGemini - PlastiNappes
- Analysis of social networks to identify images of plastic slicks at sea and their location.

The Communication Department

The Communications department works to promote all the actions of The SeaCleaners' other departments, to better emphasise the association's positioning.



In 2020, the unit worked on the following actions:

- Overhaul of the association's visual identity and communication tools (videos, brochures, presentations, leaflets, stands, etc.).
- Stepping up digital communications, to continue to raise public awareness of plastic pollution and disseminate information on eco-actions to take during the Covid-19 and containment periods.
- Publication of several articles by Yvan Bourgnon in the general press (Libération, Ouest-France, Huffington Post) and the trade press (Le Marin).

The SeaCleaners joins several international alliances

United Nations Decade of Ocean Science for Sustainable Development, CleanSeas, Plastic Pollution Coalition, Break Free from Plastic, Blue Manifesto.

Signature of several image partnerships

Union Nationale des Footballeurs Professionnels, Popeye, France-International Chambers of Commerce and Industry Network, Global Partnership on Marine Litter Management.

