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# Advocacy Report

for Stakeholders and  
decision makers within  
the fields of ocean sports  
& ocean preservation



**OSES**  
OCEAN SUSTAINABILITY THROUGH  
EDUCATION AND SPORT

**Sport and  
Citizenship**  **Sport et  
Citoyenneté**  
Sport serving society Le Sport au service de la société

 UNIVERSITAT DE  
BARCELONA

 SURFRIDER  
FOUNDATION

 Ocean  
As Common

**LA VAGUE NORMANDE**  
LOUÏS DE VIOLE DE NORMANDE



 **DAN**  
EUROPEAN ALLIANCE NETWORK EUROPE

 **emsea**

begi  
bistan

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# Who are we?

## Abstract on OSES project “Ocean Sustainability through Education and Sport”

The project “Ocean Sustainability through Education and Sport” focused on the development of tools for federations and local sports actors to educate youth in eco-responsible actions and develop environmental awareness from an early age through sport. It is the result of a collaborative effort involving [nine partners](#).

### OBJECTIVES

It has been developed around three main objectives:

- Assess the experience and insight of active sports organizations on creating and implementing an awareness campaign and educational methodology towards ocean and seas preservation,
- Develop educational and environmental awareness methodology at local level to foster ocean protection through sport,
- Measure and enhance the social and environmental impact of the programme implemented to strengthen advocacy toward ocean protection.

### PILOT INTERVENTIONS

The project was built around four pilot interventions, implemented by sport organizations at local, regional and European levels.

Those pilot interventions consisted of integrating pedagogical methodology, about ocean protection and environmental awareness, into day-to-day sports activities and as an essential part of sports activities. More than only implementing activities, one of the main objectives was to measure the social and environmental impact of our field interventions, in order to showcase the benefits and importance of educating the youth on environmental issues with concrete, measurable and identifiable results. By defining the spectrum of analysis and the tools used with relevant stakeholders, the project ensured that the results obtained were appropriated and translated into operational terms.

### TOOLS FOR THE COMMUNITIES



Discover the OSES good practices handbook et reports by the OSES project: <https://oses-project.org/ressources-oses/>

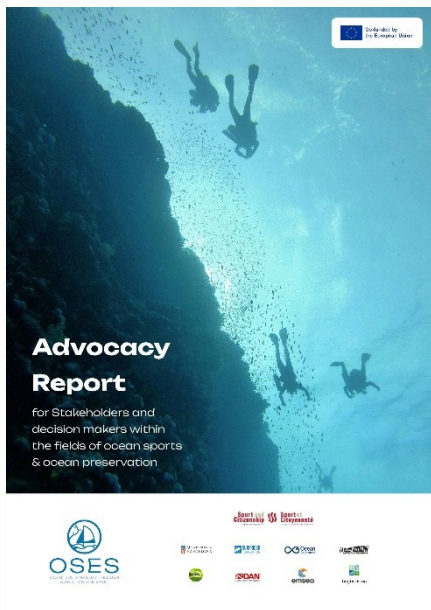


#### KEYS FIGURES OF THE HANDBOOK ON GOOD PRACTICES



- 25 projects in 17 countries
- Contributions by 30 actors
- 6 keys subjects explored
- 4 Pilots interventions on field

## Our purpose - why this advocacy paper?



*Nautical sports are inherently dependent on healthy marine environments. Clear waters, stable ecosystems, and predictable weather conditions are prerequisites for safe and enjoyable participation. This dependency establishes a natural incentive for athletes and enthusiasts to protect ocean health. Beyond this practical connection, nautical sports foster an emotional bond with the sea. Psychologists studying outdoor recreation have shown that direct engagement with natural environments cultivates pro-environmental attitudes and behaviors. For many sailors, surfers, or divers, the ocean is more than a setting—it is a partner, teacher, and source of spiritual renewal.*

The EU funded “Ocean Sustainability through Education and Sport” - OSES project gathering a consortium of nine partners, has worked on the past three years, on developing concrete tools, on field pilot interventions and a community to enable this special link for the marine environment and ocean conservation, through awareness raising, education and actions of nautical sports youth trainees and enthusiasts.

In this sense, the OSES project was a unique, positive and innovative experience. It succeeded in giving the capacities to nautical sport club to develop its own methodology, its toolkit and on field intervention for ocean preservation.

The project particularly enhanced citizen science, by enabling the collection and sharing of data, from the sport practitioners to universities and others scientific institutions. Globally, OSES project has:

- disseminated ocean literacy among young people and nautical activities' professionals,
- raised awareness on ocean plastic pollution and citizen science practices,
- strengthened collaboration between environmental educators, sports trainers, and scientific institutions,
- improved educational methodology by testing new tools and adapting to real conditions,
- reinforced sport clubs commitment to sustainability and the integration of environmental values.

To support, disseminate, and replicate these achievements across the EU—while ensuring that nautical sports become an effective platform for sustainability—systemic alignment is required among environmental policymakers, sporting federations and organizations, and other key stakeholders at local, national, and European levels.

The purpose of this paper is to present the recommendations and calls for actions from the nine OSES partners to insure this positive shift. It is addressed to:

- Local ocean, marine environment and nautical sports organizations, stakeholders and decision makers, such as local sport clubs, local councils, citizens and NGOs involved in nautical sports and ocean conservation, universities, scientific institutions, ...
- National, ocean, environmental and nautical organizations, stakeholders and decision makers, such as national nautical sport federations, national non-governmental and governmental organizations, agencies and ministries involved in nautical sports and marine environment protection,
- European, ocean, marine environment and nautical organizations, stakeholders and decision makers, such as European nautical sport federations, non-governmental and European organizations, agencies, decision makers involved in sports and marine environment protection.

# Our context

## What challenges are we facing?

*Oceans and seas cover more than 70% of the Earth's surface and keep Earth habitable: they allow us to breathe, to feed, to have economic activity and to protect us from global warming.*

*Oceans are also the main regulators of our climate and the world's climate by absorbing about 30% of CO<sub>2</sub> and 93% of the excess heat generated by human activities.*

*Oceans release more oxygen into the air than all the forests in the world, by providing 50% of the oxygen we breathe.*

*Composed of 250 000 known species, Oceans are a vital source of biodiversity.*

*Oceans play an indispensable role in the world economy by allowing 90% of international trade to move through its waters.*

*Over 40 percent of the EU population depend today on these environments whether for fishing, trade, tourism, shipping. Thus, oceans and seas play a crucial role in the earth's equilibrium and provide benefits closely related to our daily life.*

However, oceans are currently under numerous and serious threats, caused by human activities.

According to the United Nations' First World Ocean Assessment much of the ocean is significantly degraded. Nearly 35% of fisheries are currently overfished (FAO), while bycatch of non-target species of fish, seabirds, sea turtles and marine mammals significantly affects marine ecosystems across the world.

Marine pollution from different sources is affecting almost every corner of the ocean. Nutrients from agriculture, animal husbandry and even from fossil fuel combustion and household waste are discharged to the coastal environment from rivers, sewer systems, groundwater seepage and brought via the atmosphere. The resulting eutrophication of coastal waters affects functioning of marine ecosystems, reduces biodiversity, as well as income from fishery, mariculture and tourism.

According to IUCN, plastic pollution comprises nearly 80% of all marine debris from surface waters to deep-sea sediments. 300 million tons of plastic gets created yearly, and 50% is single use only.

The European Environmental agency estimates that 10.000.000 million tons of litter end up in the ocean every year and 100,000 marine creatures a year die from plastic entanglement. Additionally, plastic fragmentation into almost invisible microplastics that are easily transported throughout the ocean and enter the food chain. Microplastics have been found in all water samples in the world's oceans including the Arctic and the deepest parts of the Mariana Trench. They also make their way back to humans and are found not only in seafood but also in sea salt and tap water.

Climate change is another serious threat that affects the ocean in multiple direct and indirect ways. Warming up, deoxygenation and acidification, increasing sea levels, intensification of extreme and destructive weather events are just a few of the serious consequences of the climate crisis. As a result, all marine ecosystems are seriously affected, with coral reefs among the most threatened by climate change. Their deterioration will have both consequences on 25% of marine species that depend on them and on the protection of coastal areas, fishing, and tourism. Without a significant reduction in carbon dioxide emissions, by 2050 almost all coral reefs will have been exposed to such a level of acidification that cripples their development.

Moreover, with the increase of temperature, there is a risk of species migration. This is dangerous for the uniformity of biodiversity on scale and would result in a decrease in the number of species in regions with higher water temperatures and a significant increase in the number of species in colder regions around the poles. These changes could have serious consequences for global fisheries and aquaculture.

Keeping the oceans clean, healthy, and stable is crucial for the survival of humankind. Recognizing the seriousness of those issues, all major policy makers such as the EU, UN as well as governments of USA and Canada, Australia etc. are undertaking efforts to protect, preserve and restore marine ecosystems.

One of the crucial aspects of those undertakings is raising awareness of the public on the crisis our natural environment is facing and education on how to protect the ocean.

## Background & framework

For more than 40 years, the European Union (EU) has underlined the need for additional action to fight against climate change and to protect and restore the environment, biodiversity, and natural resources.

This is an explicit objective of EU environment policy mentioned under Article 191 of the Treaty on the Functioning of the European Union:

*“Union policy on the environment shall contribute to pursuit of the following objectives: preserving, protecting and improving the quality of the environment, protecting human health, prudent and rational utilization of natural resources, promoting measures at international level to deal with regional or worldwide environmental problems, and in particular combating climate change.”*

14 years ago (June 17th, 2008) the European Parliament adopted The Marine Strategy Framework Directive (MSFD) - the environmental pillar of the EU's Integrated Maritime Policy (IMP). The goal

of the Directive was to reach ‘good environmental status’ (GES) of the EU’s marine waters by 2020, to provide protection and preservation of marine waters, and to prevent future deterioration. This ambitious and comprehensive marine policy brought mixed results with significant and important improvements in some areas and furthered deterioration in others.

Therefore, the EU Biodiversity Strategy for 2030, adopted as part of the European Green Deal in May 2020, aims to further protect, and restore marine ecosystems. Those steps taken by the EU are in harmony with global understanding of the importance of marine resources as well as the efforts to protect and restore them. Appropriate policies and projects undertaken across the EU will help achieve Sustainable Development Goals listed in the United Nations Agenda 2030 and create “the ocean we want”, which is the objective of the United Nations Decade of Ocean Science for Sustainable Development.

And more importantly, the Green Deal is more than different strategies put together. It aims to turn climate and environmental challenges into opportunities by engaging all sectors of the economy and the civil society. Consequently, these new policy instruments require a strong involvement of various stakeholders, including the sport sector.



## The role of sport

Sport has a very real impact on the environment, notably in mitigating and fighting climate change. This comes from all the sporting events organized, whether they are big events (Olympic Games, World Cup, European Championships and so on) or at grassroots level (over 2.5 million sporting events are held each year in France alone), from the construction and management of facilities, from the use of equipment to name a few of the many examples.

In any case, sport sector stakeholders are increasingly aware of the issue, and numerous regulations and public policies are moving in the direction of increased protection for the environment. Sport, however, because it hands down educational and exemplary values, can and must play a role in raising awareness and changing behaviors.

This is true regarding the protection of the environment and its various dimensions:

- fight against climate change,
- reduce pollution,
- raise awareness of the environment,
- protect biodiversity, etc.

The inclusion of the "green sport" dimension in the European Union's Work Plan for Sport underlines that sport activities could be useful to fight against climate change. Indeed, this sector could become "greener" and more sustainable. It could be a channel for changing societal behavior, provide best practice examples that can serve as models for adoption elsewhere and prepare the Member States of the European Union for the impact of climate risks.

### Subject

- Green Sport

### Theme

- Education for Sustainable Sport
- Environmentally friendly sport practices, facilities, and events
- Evolution of sport and its practice in the context of climate change

### Objectives

- Exchange of best practices Knowledge enrichment Raising awareness
- Development of a proposal for a common framework with shared commitments, considering the European Climate Pact

## The project “ocean sustainability through education and sport”



The project “Ocean Protection through Education and Sport” answered to the three key dimensions mentioned in this action plan, with the objectives to strengthen the role of sport actors in the fight against climate change:

- Education for sustainable sport. The main aim of the project was to develop tools, methodology for federations and local sports actors to educate youth in eco-responsible actions and develop environmental awareness from an early age through sport.
- Environmentally friendly sports practices, facilities and events. With the involvement of different sport organizations, from grassroots clubs to European federations, in pilot interventions, the project also gathered expertise to include environmental aspects into all sportive activities, including events, competitions and day-to-day management of organizations.
- Evolution of sport and its practice in the light of climate change.

With a specific focus on ocean health and preservation, the OSES project tackled activities in which the natural environment is of paramount importance.

Those activities are especially impacted by the challenges face by oceans: dredging and dumping, oil drilling, ocean pollution, large commercial vessel traffic, poorly planned coastal development and water quality problems.

## The role of sport in educating the youth

For several years now, we have known the benefits of sports on the health and physical development of young people. Indeed, it allows them to fight against the harmful effects of a sedentary lifestyle, to generate significant health benefits and to participate in the personal development of each of them.

However, the practice of physical activity and sport can also have a powerful impact on the general education of young people, and as such be a vector of learning. Indeed, sport contributes to a better-quality education:

- it allows the development and acquisition of sport values such as respect, team spirit or solidarity, which are useful to understand the values that young people will have to carry as citizens.
- sport promotes education by building fundamental skills such as responsibility, effort, teamwork, and decision- making.
- at the same time, it provides professional qualifications that will prove very useful in the integration of young people into the world of work.

The practice of physical activity and sport is therefore a positive force that can lead young people to acquire new skills, to build fundamental learning whether it is formal or informal.

As such, sport can be a means of education for the youngest but also contribute to solving societal problems alongside other actors. In this context, all forms of engagement and active citizenship are to be promoted.

Within the framework of the OSES project as a learning platform, ocean sports contributed to educate and raise awareness on the preservation of oceans and coastal areas.

Indeed, ocean sports could be used as an educational tool to promote specific environmental goals by combining learning and physical activity. As an example, nautical sports could educate youth in eco-responsible actions, in the role of the oceans, the threats they face due to global warming, make them aware of the dangers of water and waste pollution.

For young people, this would allow them to better understand the issues related to the protection of oceans and coastal areas in a rather playful setting. Consequently, they could adopt behaviors that take into account the balance between the environment and sports activity, and more generally human activities. Of course, this is not limited to the protection of the oceans and coasts. Indeed, sports can be used to raise awareness and educate young people about other issues, always in a playful way.

# Oses actions

## What has been done so far?

### Concept of Ocean Literacy

Like many ocean protection and education initiatives, the concept of Ocean Literacy (OL) started as a grassroots movement of marine educators and scientists. Concerned with the scarcity of ocean topics in the official science education standards in the US, and the resulting lack of public's understanding of the importance of the ocean to all humankind, ocean science professionals and policy makers undertook efforts to create guidelines for marine education.

The first concept of OL was created in 2004 and, in the simplest terms, was defined as understanding the ocean's influence on people and their influence on the ocean.

Today, seven Ocean Literacy Principles (OLPs) with 45 Fundamental Concepts describe in detail the role the ocean plays in the functioning of our planet and our civilization.

Earth has one big ocean with many features:

- The ocean and life in the ocean shape the features of Earth
- The ocean is a major influence on weather and climate
- The ocean makes Earth habitable
- The ocean supports a great diversity of life and ecosystems
- The ocean and humans are inextricably interconnected
- The ocean is largely unexplored

The overarching objective of the OL concept is to create an ocean-literate society, in which everyone understands the essential principles about the ocean, can communicate about the ocean in a meaningful way and is able to make informed and responsible decisions regarding the ocean and its resources. This concept was brought to Europe in 2011 when the first international meeting of marine educators was initiated by the College of Exploration, which resulted in the formation of the first OL network in Europe - European Marine Science Educators Association (EMSEA).

In 2013, OL was for the first time incorporated into official EU initiatives when the Galway Statement was issued. The goal of this agreement, signed by the EU, US and Canada, is to ensure that the Atlantic Ocean is

*“healthy, resilient, safe, productive, understood and treasured so as to promote the well-being, prosperity, and security of present and future generations”.*

The concept of OL served as a foundation of the Galway Statement and is therefore present in all Priority Areas of the Atlantic Ocean Research Alliance (AORA).

Recognizing the need to increase the environmental awareness of EU citizens through promotion of OL, the European Commission has been supporting large projects that aim at creating an ocean literate society. The objective of the Sea Change project was to change how EU citizens view the marine environment and empower them to make environmentally responsible decisions. The ResponsSEAbLe initiative was helping them understand their connection to the sea.

In 2020, the European Commission initiated the establishment of the European Ocean Coalition (EU4Ocean) was formed to foster collaborations among diverse stakeholders and enable the advancement of OL across all European countries. The need to raise awareness about ocean issues and work towards an ocean literate society is not only one of the goals of EU policymakers but also UN experts.



Challenge 10 of the ongoing UN Ocean Decade - Restore humanity's relationship with the ocean is:

*“an inspiring and engaging ocean where society understands and values the ocean in relation to human wellbeing and sustainable development”.*

This objective will be achieved by diverse OL initiatives and projects such as Ocean Literacy for ALL that aims to:

*“encourage cooperation and exchange on ocean education to improve ocean literacy; raise awareness of the two-way interactions between the ocean and people's daily lives, and empower citizens to adjust their everyday behaviour; seek and apply innovative ways to make current and future citizens ocean literate, so that they recognize environmental challenges and can make informed and responsible decisions related to ocean stewardship and the use of ocean resources.”*

The oceans can represent far ecosystems for many citizens, even unknown, and thus these ecosystems can receive less attention in relation to their conservation.

Therefore, it is important to share experiences from the associations that are dedicated to the protection of the ocean and that can influence the decision makers who are going to make the decisions that in the future may have such a high impact on our environment. The strength of a consortium allows it to have a real impact on the policies affecting ocean protection.

## What could we do more?

Sports, especially ocean sports, are one of the ways for humans to experience and interact with the marine environment. As opposed to “leisure tourists” water sports enthusiasts take advantage of this unparalleled ecosystem all year round, and many times regardless of air and water temperature.

Therefore, they are among most affected by the deterioration of the environment, whether it is due pollution that prevents them from entering water, changing hydrological conditions and weather patterns (e.g., wind patterns) that make practicing certain ocean sports impossible etc. Finally, many young water sports enthusiasts grow up to be professional athletes who can advocate for the environment, sports’ business owners that significantly contribute to local economies or adults who pass on their passion to younger generations.

That is why it is important to include education and raising awareness among water sports enthusiasts at every level of their engagement with the marine environment.

Creating an ocean literate community of people involved in water sports help to ensure that no further damage will be made to the marine environment and even help improve the state of our waters.

As an example, sport can become an effective way and tool for federation, sport organization and local sport actors to educate in eco-responsible actions and to create environmental awareness toward the question of oceans health and protection.

Several innovative sports activities can be developed, such as collecting waste, raising awareness of biodiversity and the marine ecosystem, coastal preservation, and understanding the issues facing the oceans today before, during or after a physical activity. To answer those issues, we built on the following specific objectives.

## Oses general objectives

The “Ocean Sustainability through Education and Sport” (OSES) project answered the overall objective of supporting Education in and through Sport. As mentioned above, we strongly believe in the role of sport in formal and non-formal education.

With urgent challenges to address when it comes to the protection of the environment, we want to make the sport movement a key actor in educating the youth to the protection of their planet and natural resources. If all sport and activities are concerned by this question, addressing the question of ocean preservation can be a first step and a laboratory to develop an overall methodology that could be first tested on our pilot interventions and disseminated to other sport activities after the project if successful.

Indeed, nautical sports, such as surfing, sailing, scuba-diving, kayaking raise specific issues, since preservation of the marine areas and a clean and protected environment is necessary to practice those sports.

Moreover, one of the strengths of this project is to promote more than one objective, with the overall aim to promote positive values of sport. Indeed, all sports are a useful tool to gather individuals about common values and commitments: fair-play, inclusion, integrity, universality, respect. But marine sports, however diverse they may be, have one value in common, the overall necessity to protect their playground if we want to keep doing what we love.

## Horizontal priorities

Our OSES project was based on an environmentally friendly approach. We gave priority to online meetings whenever possible to limit emissions related to travel and organization. Then, during the pilot interventions, all support given to the sport organization have been given through videoconference. Moreover, when the consortium meets, we made sure to limit paper printing and prefer electronic documents for our communications. Meetings were also the occasion to provide all the participants with information about sustainability.

Based on a consortium of partners from European countries, our strategy has been devised to support a better outreach to participants from diverse backgrounds.

We aimed to improve the outreach to people with fewer opportunities. To do so, our pilot interventions proposed a particular focus on young people in a situation of marginality.

As showcased in the methodology, our consortium members which put in practice the pilot interventions already had a strong experience in social inclusion actions especially towards young people with physical and mental disabilities, and towards socially marginalized youth.



The activities of the OSES project were in line with the commitment of our consortium members. Their strong local roots and their partnerships with local entities which help marginalized youth access sport activities reinforced the social inclusion dimension of the project, linking it with our environmental ambition. The participants implemented non-discriminatory policies, promoting respect, cooperative approach, and intercultural dialogue. Gender issues were at the heart of our think tank's concerns. We ensured equal representation in all our events, with 50% women and 50% men represented in every round table.

# Oses consortium



## COORDINATOR SPORT AND CITIZENSHIP THINK TANK

Sport and Citizenship is the leading European think tank in the field of sport. Created in 2007 after the publication of the White Paper on Sport, it aims to support the development of the European dimension of sport. Sport and Citizenship is dedicated to the survey of European public policies in the field of sport, and the promotion of sport's societal impact. Ultimately, Sport and Citizenship promotes sport and physical activity as elements of a common European identity. Sport and Citizenship has been committed since its very beginning to the launch of a European civic dialogue in the field of sport thanks to multidisciplinary and transverse reflections aiming at putting European sport stakeholders in relation with one another: from different levels of governments (local and national), from the sport movement, as well as from civil society, academia and the private sector.



## SURFRIDER SPAIN

<https://surfrider.es>

For years, Surfrider Spain has been working on different problems that affect the ocean, representing it and its users in different issues: marine litter, coastal management and climate change. The entity works in Spain within the framework of the Atlantic coast and the Mediterranean Sea, since the entity's headquarters are in San Sebastián and it has a local group of volunteers in Barcelona and Tenerife. It represents Surfrider Foundation in Spain.



## EMSEA

<https://www.emseanet.eu>

European Marine Science Educators Association (EMSEA) is a network, a membership organisation, representing academia, researchers, NGO's, companies, formal (schools) and informal (science) education institutes, acting as one voice across Europe and beyond. Our mission is to act as a hub for the European marine education community to promote and deliver ocean literacy across society by working with scientists, teachers, policy makers and the public. Our shared vision is a society of ocean-literate citizens who recognize the vital importance of the ocean, working together to ensure it is sustained for future generations.



## UNIVERSITY OF BARCELONA

<https://web.ub.edu/inici>

Universitat de Barcelona (UB) was founded in 1450. Today it boasts of a student body of 62.984, a research staff of 5.532 members and an employee number of 8.601. Degrees are offered in 73 different areas of teaching with numerous postgraduate and doctorate programs as well as continuing education courses. UB is the largest of the six universities in Barcelona and of the ten in Catalonia. The UB is ranked the first Spanish university, and the twenty third European institution, in scientific quality and productivity.



## OCEAN AS COMMON

<https://oceanascommon.org>

Ocean as Common strives to make humans actors in the preservation of the Ocean and the Aquasphere. From waves to clouds, from underground waters to rivers, from the great marine currents to the polar ice caps, it is all one global circulation that deploys in three dimensions - around, on the surface and in the depths of our planet - to form what we can call an "Aquasphere". Ocean As Common developed this holistic concept, inspired by the Hydrosphere and the cycle of water, to highlight the strong link between humans and water in all its forms. We are all part of the aquasphere, we have an important role: our actions can both harm its functions or regenerate them.



## DAN EUROPE

<https://www.daneurope.org/fr/>

DANEU is the European, Middle East and nearly pan-African chapter of the global Divers Alert Network, the leading entity providing guidance and support in the matter of diving safety. To inform its guidance, DANEU is strongly research-based and such research largely derives from the contribution of data and samples from volunteer divers. In this respect, DANEU has embraced MCS (with a medical angle) as far as in 1983 and has constantly broadened its interest in the subject. For instance, in the context of project Green Bubbles RISE it has started to include environmental data in its risk-factor analyses, thereby bridging to oceanographic MCS.



## GREEN COAST

<https://www.greencoast.pt>

GREENCOAST Surfschool project is a surf school which has credited and accredited teachers to carry out various activities and training in various surfing courses, such as introduction to the aquatic environment and trainings certified by IFP and Turismo de Portugal. GREENCOAST is composed of teachers who have been competitors, national and international and judges and is a World Surf League partner which is the only government body and league that globally protects professional surfing.



## BEGI BISTAN

<https://www.begi-bistan.com/fr/>

Begi Bistan is a multidisciplinary organisation founded in 2000, dedicated to nature, culture, ecotourism, and environmental education across Euskadi. With a specialised team covering nautical activities, heritage, gastronomy, and leisure, the organisation designs unique, content-rich experiences that place people and territory at the centre—particularly in the Basque Coast Geopark, Orio, and the Gipuzkoan coastline.

The organisation holds multiple quality and sustainability certifications, including the Tourism Quality Commitment, the ICT Good Practices Programme, and the Ethical Code of Tourism in Euskadi, and has long integrated innovation and responsible practices into its work.

Within this framework, Begi Bistan develops the URA MUGIMENDUAN Project, which uses environmental education as a practical tool for sustainable development. A key component of this project is the river clean-up programme, carried out by kayak or SUP. Participants collect waste directly from the river ecosystem and subsequently classify, quantify, and analyse the materials gathered. This methodology transforms theoretical learning into measurable action, strengthens environmental awareness, and promotes the adoption of more conscious and responsible habits toward nature.



## LA VAGUE - SAILING LIGUE OF NORMANDY

<https://lavaguenormande.fr>

La Vague Normande is a brand of the Normandy Sailing League. It was created to promote water sports and sailing in Normandy and aims to highlight Normandy as a leading destination for water sports.

La Vague Normande promotes clubs, the network of professionals, careers, water sports and sporting news, and events. It offers a range of services to benefit the network, through:

- an extensive Regional Training Program, notably with its Regional Training Center for young competitors and its Sailing Center for access to high-level competition: La Vague Normande Sport,
- a Qualiopi©-certified Professional Training Center: La Vague Normande Formation,
- an Event Activity Center for the production of nautical competitions or major events: La Vague Normande Événement.

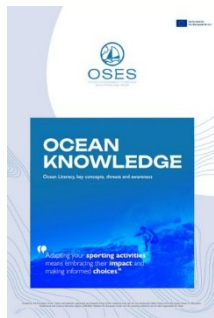
La Vague Normande brings together traditional practices as well as sliding, expressive, and foil practices. It is interested in recreational, educational, and competitive practices. It remains committed to ensuring that every experience at an FFVoile sailing club is one of “quality,” whether in terms of the welcome and services provided, the educational and teaching skills of the instructors, or the value and uniqueness of the activities on offer.

# OSES achievements

## Achievement 1 - Ressources, methodology & tools

Gather knowledge and expertise of active sports organizations, in and outside sport, on creating and implementing an awareness campaign and educational programs to create a methodology towards oceans and seas preservation through sport.

To this end, OSES project developed pedagogical and practical methodology and tools for the environmental awareness of the youth guided by top researchers in the above-mentioned fields.



**OCEAN KNOWLEDGE**  
Ocean Literacy, key concepts, threats and awareness



**CHANGING OCEAN**  
OSSES Report on the state of the Ocean and European Seas on Ocean Literacy and Sports



**THE OSES GOOD PRACTICES HANDBOOK**

The OSES Good Practices Handbook seeks to compile impactful actions and projects across Europe and, serving as a benchmark for environmental awareness and ocean protection education.



**PRACTICAL TOOLS FOR OCEAN CONSERVATION AWARENESS**

Discover specialized tools designed to assess water quality, underwater acoustic pollution, and marine litter, while also monitoring the impacts of climate change. These tools contribute to ocean health, biodiversity conservation and coastal protection.

## Achievement 2 - Pilot interventions' management

Test the implementation of an innovative and comprehensive pedagogical methodology in pilot interventions at the local level to foster environmental awareness through marine sports.

Developing a methodology and pedagogical tools is only good if it is implemented in field activities, especially in a domain as important as ocean preservation. The selection of four marine sports organizations as partners, has given the opportunity for the project to directly implement actions on the ground and look for a positive impact in its actions.

Three main tasks have been implemented:

- assessment of the needs and diagnosis for pilot interventions,
- tailored support provided to pilot interventions to implement engagement activities with Citizen Science actions
- awareness raising' activities to showcase the role of education in ocean preservation

### PILOT INTERVENTIONS' FACTS

#### 1<sup>st</sup> PILOT INTERVENTION IN MALTA

5th June 2024

The OSES project aimed to raise the environmental awareness of young people from the earliest age by using sport, and to educate them about eco-responsible activities, with particular emphasis on the seas and oceans. Four of the project partners, Dan Europe, Sport and Citizenship, Surf rider Spain and EMSEA, met on 5 June in Malta for a day of awareness-raising, study and experimentation.



Understanding the changes in the Mediterranean Sea  
Developing an environmental conscience, particularly among young people, was a key issue for OSES. Everything pointed to the urgency of preserving the seas and oceans. *“July 2023 registered the highest average temperature for the last forty years in the Mediterranean: 28.17°C”, says Francisco Pastor, meteorologist at the Mediterranean Centre for Environmental Studies. Around Malta, “surface sea temperatures measured at Delimara show temperatures increasing constantly at an average-high rhythm of nearly +0.05°C per year over the past forty years”.*



This rise in temperature is fast modifying the identity of Mediterranean flora and fauna. Fish are one of the best indicators for monitoring this phenomenon. The warming of the sea and of the air have a direct influence on biodiversity. This evolution has an impact on the local marine ecosystem, with the appearance of new fish species, partly due to the arrival of exotic species from the Red Sea.



### Teaching resources tested in real conditions

The partners of OSES – ocean specialists, water sports clubs, or organizations committed to the environment – complemented each other and work together with the aim of making teaching resources available to ocean sports federations and local sports stakeholders, and of making the sports movement a key actor in educating young people about protecting the planet and its natural resources. The aim of the one-day event was to reach a better understanding of the marine ecosystem and the impact of climate change on the one hand, and on the other, to test different tools used by DAN Europe, including a diving methodology, in order to assess how easy they are to use and their effectiveness.



Two classes from the [Junior College of Malta](#) and their biology teachers took part in the exercise by means of different activities.

By snorkelling - diving with a mask and tube to observe the marine fauna -, the young people discovered the different fish present around Malta. They had an information sheet to help them find and identify the species in the water. It is when they see the effects that children realise how important it is to protect these waters and the planet.

After this activity, various tests (pH, phosphate, nitrites/nitrates...) enabled them to check the quality of the water, so that they could understand the challenges currently facing the Mediterranean. The young people helped to add this information to the Sea Watchers platform, used to collect data on marine areas.

## 2nd PILOT INTERVENTION: OSES AWARENESS EVENT

*on October 3rd & 4th, 2024, in Orio, Spain*

Organized by Begi Bistan, an agency specializing in outdoor activities respectful of the environment and partner of the project, this event brought together young people, educators, and local stakeholders to promote ocean preservation through education and sport. Since its launch in January 2023, the OSES project has focused on raising environmental awareness from a young age, using sports as a powerful tool to address climate change and advocate for eco-responsible actions.



### A Day of Engagement and Learning

On the first day, local schoolchildren participated in hands-on environmental monitoring sessions in-door - because of the bad weather - and a coastal cleanup giving them the opportunity to directly engage with their environment and learn about the importance of ocean conservation. Alongside Begi Bistan, Sport and Citizenship, EMSEA and Surfrider España, partners of the

OSES project, took part in the event. These activities demonstrated how sports can inspire young people to take action and become advocates for the protection of our seas and coastlines.

### Day Two: Connecting Sport with Ocean Protection

On the second day, a group of adults was welcomed. The day was filled with interactive activities and educational sessions that connected sport with ocean protection. Participants explored how physical

activity can foster eco-responsibility and combat climate change, and discussed ways for local sports organizations to integrate these lessons into their daily practices.



Adults had the opportunity to engage in a supervised kayak session supervised by Begi Bistan. This hands-on experience allowed them to test the methodologies developed during the project under the guidance of the Surfrider Spain. Activities on the water included utilizing various tools to assess water quality, such as:

- The Forel Ule scale for classifying water color,
- Secchi disks for measuring water clarity,
- And a hydrophone to evaluate noise pollution affecting marine life.

Participants also used a waste collection kit to gather marine litter, including microplastics, and documented their findings with biodiversity charts. This engaging day highlighted the vital connection between sport and ocean conservation, empowering participants to become advocates for sustainability in their communities. The workshop also included sessions on the impact of climate change, biodiversity loss, and water pollution, providing a deeper understanding of the threats facing our oceans. Additionally, the event showcased the [OSES Good Practices handbook](#), a key resource developed to help water-sport federations and local organizations integrate environmental education into their activities.



### 3rd OSES PILOT INTERVENTION : OSES Sails Forward: Ocean Awareness in Action in Granville, France 27th & 28th June 2025

This past Saturday, the OSES project held a pilot intervention in the coastal town of Granville, France.

A one-day initiative blending ocean education with the sport of sailing to inspire the next generation of ocean stewards.

Organized with the support of local partners, [8 Milles Nautic](#) and [La Vague Normande](#), the event brought together young people, educators, and sailing instructors to explore how sport can serve as a powerful entry point for learning about and protecting our marine environments.

#### Sailing as a Floating Laboratory

After an introduction to the OSES project and a discussion of key ocean threats from climate change to pollution participants took to the sea. But this was no ordinary sailing session: the boats became floating laboratories, transforming the sailing experience into a hands-on exploration of the marine environment.

#### Onboard, participants:

- Tested water quality using field instruments (Secchi Disc, Forel-Ule scale)
- Measured water temperature to better understand climate-related changes in the marine environment,
- Contributed to coastal erosion tracking through the COASTSNAP citizen science tool.

This innovative approach allowed youth to engage directly with the ocean as both athletes and observers building scientific literacy while deepening their personal connection to the sea.

#### One Day, Lifelong Impact

This Granville intervention once again proved that combining sport and science is a powerful method for engaging youth in environmental action. Through the OSES project, young people are gaining both knowledge and agency to become ambassadors for ocean sustainability in their communities.

## 4th Pilot intervention -Ocean Protection and Sport: Successful Awareness Days in Espinho

April 23rd and 24th, 2025

The fourth OSES (Ocean Sustainability through Education and Sport) awareness event took place on the vibrant beaches of Espinho, Portugal, on April 23rd and 24th, 2025. Organized with the support of the local surf club [Green Coast](#) and project partners ([EMSEA](#), [Surfrider Spain](#)), this two-day pilot intervention brought together young people, educators, and environmental advocates to explore the powerful connection between sport and ocean conservation.

Since its launch in January 2023, the OSES project has aimed to educate the next generation about pressing environmental challenges using sport as a transformative tool for awareness and action.

### A Day of Engagement and Learning



The first day opened with an introduction to the OSES project, setting the stage for reflection on some of the most urgent threats facing our oceans today — marine pollution, climate change, and biodiversity loss.

In addition, participants, local schoolchildren, then took part in a series of interactive, science-based workshops. These included:

- measuring water quality using simple field tools,
- capturing shoreline images with the COASTSNAP system to support citizen science on coastal erosion, and
- sifting small portions of beach sand to identify and analyze potential microplastics, raising awareness of invisible yet pervasive marine pollutants.



These engaging, hands-on activities helped young participants understand their local environment and the importance of preserving it. By actively involving them in scientific observation, the day nurtured both curiosity and a sense of responsibility toward the ocean.

day nurtured both curiosity and a sense of responsibility toward the ocean.

### Day Two: Connecting Surfing with Sustainability



On the second day, the focus shifted to sport as a driver of awareness. The morning began with a supervised surf session, where ocean conservation was integrated into practice and discussion. Participants learned not just how to ride waves, but how to respect and protect the ecosystem that makes surfing possible.

After surfing, the group came together for a beach cleanup. Marine litter was collected, sorted, and categorized, allowing participants to better understand the sources and impacts of pollution on coastal environments. The cleanup was followed by a wrap-up session including post-activity surveys, designed to measure the impact of the intervention and the growth in environmental knowledge among attendees.

## Inspiring Ocean Advocates Through Sport

This event once again confirmed that combining physical activity with environmental education is a powerful strategy for sparking engagement and change. Through the OSES project, young people are gaining the knowledge and tools to become ambassadors for sustainability — not just within their clubs, but in their communities at large.

As the project continues to unfold across Europe, the aim is clear: to embed these types of eco-conscious activities into every watersport club, spreading best practices and promoting a shared sense of stewardship for the ocean.

### 2. Activities Implemented

- Theoretical and Practical Workshops with students from Escola Secundária Dr. Manuel Gomes de Almeida (Sports class).
- Ocean Literacy Modules on marine biodiversity, coastal management, microplastics, and marine pollution.
- Citizen Science Data Collection (water and sand quality assessments, species observation, and waste categorization).
- Sustainable Surf Sessions, including eco-practices and low-impact techniques.
- Beach Cleanup Action with classification and weighing of marine litter.

### 3. Methodological Contribution

The intervention tested hybrid learning models combining:

- Formal education (school-based modules)
- Non-formal learning (outdoor sport activities)
- Data-driven awareness (basic environmental monitoring protocols inspired by Surfrider Spain & Sea Observers)

### 4. Stakeholders Involved

- Students & Educators from Escola Dr. Manuel Gomes de Almeida
- Local Government (Espinho Parish Council)
- GreenCoast Trainers & Ocean Literacy Facilitators
- OSES European Observers & Researchers

### 5. Key Learnings

- Surf and sport activities increase youth engagement and emotional connection to the marine environment.
- Involving local schools strengthens long-term community-based action.
- Combining environmental education with practical sport-based modules enhances retention and motivation.

## Impact of the OSES Project on Green Coast Surf School and the City of Espinho

Green Coast Surf School's participation in the European project OSES – Ocean Sustainability through Education and Sport over the past three years has led to a profound transformation in its educational mission and institutional approach. As the only Portuguese surf school involved in the European consortium, Green Coast took on an active role in shaping educational methodologies, promoting local capacity building, and bridging sport, environmental education, and citizen science.



## 1. Transformation within Green Coast Surf School

Through this project, Green Coast has:

- Integrated ocean literacy as a core pillar of its educational and training programs.
- Developed internal skills in citizen science, coastal environmental management, and sport-based sustainability.
- Established strategic partnerships with schools, municipalities, researchers, and European stakeholders, reinforcing its role as an educational actor with social and environmental responsibility.
- Implemented innovative teaching practices that combine surf instruction with environmental data collection, biodiversity monitoring, and promotion of ecological awareness among young athletes.

Over the course of the project, the school also improved its trainer education programs by including modules on environmental responsibility and co-created educational tools such as sustainable surf kits, which are now ready to be replicated across Europe.

## 2. Contribution to the City of Espinho

Green Coast's engagement and Espinho's involvement in this European initiative brought strong, positive impacts at the local level:

- Positioned Espinho on the European map as a reference in sustainable sports and ocean literacy practices.
- Involved schools, youth, teachers, local authorities, and policymakers in a collaborative process of active learning and environmental action.
- Enhanced the international visibility of the city, showcasing its natural heritage and strengthening its appeal as a sustainable tourism destination.

The 4th OSES Pilot Intervention, held in Espinho, became a model of best practices, where new methodologies were tested in a real-world setting with strong community engagement.

## Achievement 3 - Impact & dissemination

Enhance the social and environmental impact of the programme implemented to strengthen advocacy toward ocean protection.

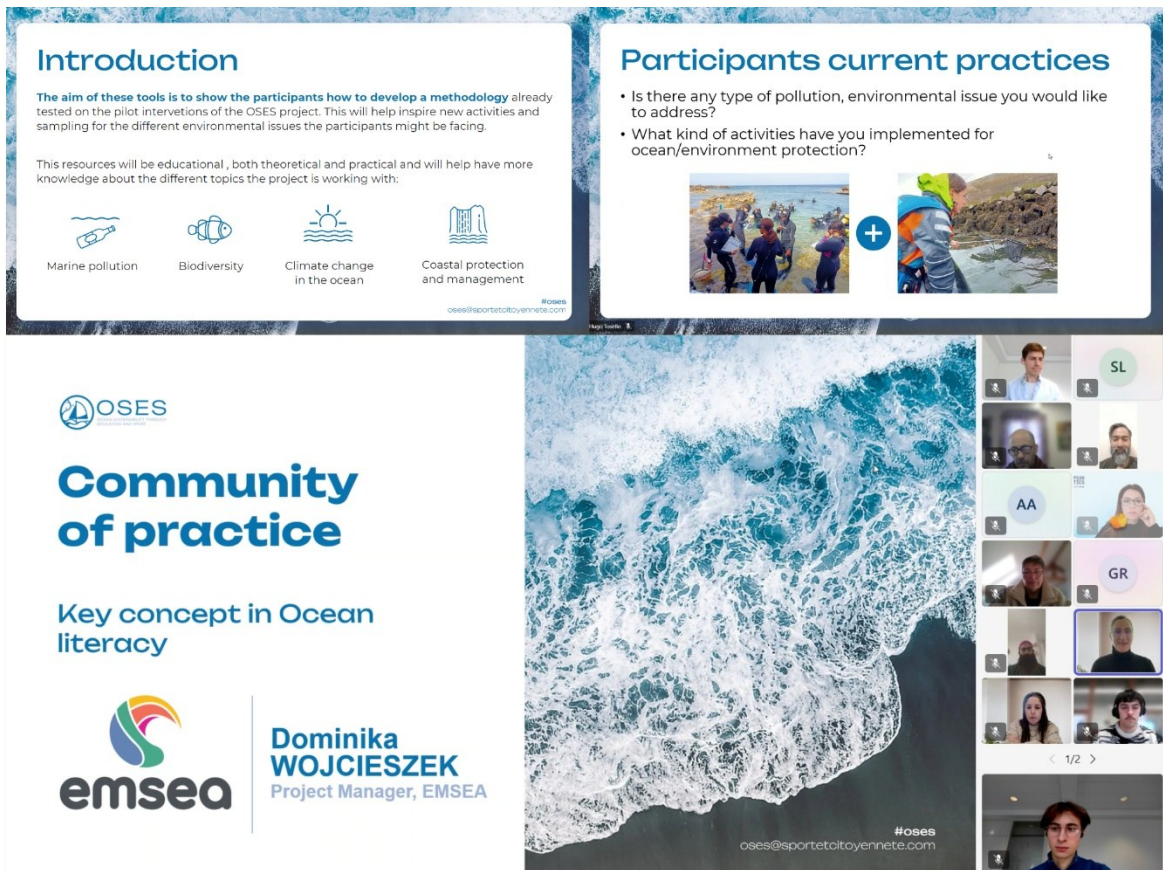
To ensure these positive impacts, dissemination materials and activities have been showcasing the role of sport in mitigating its environmental impact, especially on ocean health. One of the key aspects of this advocating and dissemination strategy has been the creation of a community of practice, with a selection of organizations through a “call for interest”.

By working with organizations sharing our ideas and beliefs, through different activities (online peer-learning, exchange of good practices and mentoring), we have created a first circle of organizations on which we could have a concrete impact and dissemination activities.

Two core activities were implemented:

- peer learning and exchange of good practices,
- mentoring sessions, including guidance on applying the OSES methodology in local contexts.

This work was organized under the Community of Practice (CoP) structure, gathering stakeholders from across Europe and beyond. Through two dynamic webinars, participants exchanged experiences, learned from expert speakers, discussed innovative local initiatives, and received practical tools for integrating ocean literacy into sport-related activities.



## Focus on the Open Call for Proposals:

### Creation of a Community for Ocean preservation through Education and Sport

The call for proposals aimed at sport organizations interested in joining a newly established community focused on fostering Ocean preservation through Education and Sport. This initiative was part of the OSES project, which aimed to enhance ocean literacy and protection through innovative methodologies and tools designed specifically for the sports sector.

#### Objectives:

1. The primary objective of this call was to identify and select sport organizations that are committed to integrating ocean sustainability into their activities.
2. Selected organizations benefited from tailored support provided by our consortium members, helping them to better understand and implement elements of ocean literacy, ocean protection, and the methodologies developed under the OSES project.

The overarching goal was to engage organizations in meaningful discussions and exchanges of ideas, facilitating the adoption of tested and validated methods for educating youth and training trainers.

#### Scope of the Call:

This call was open to sport organizations that:

- Are open to adopting and implementing methodologies developed in the OSES project to enhance their understanding and promotion of ocean literacy and protection.
- Are committed to promoting sustainability, particularly ocean sustainability, within their operations and activities.
- Have a demonstrated interest in education and youth engagement.
- Are willing to actively participate in a Community focused on exchanging ideas and developing best practices for ocean sustainability through sport.

#### Benefits of Participation:

Selected sport organizations received:

- **Tailored Support:** Organizations enjoyed customized assistance from our consortium members, designed to help them integrate ocean sustainability principles into their activities.
- **Access to Methodologies and Tools:** Participants had exclusive access to the methodologies and tools developed within the OSES project framework, which have been rigorously tested and validated.
- **Capacity Building:** Opportunities for training both youth and trainers on ocean sustainability issues, leveraging the knowledge and resources provided by the OSES project.
- **Networking and Collaboration:** Membership in a dynamic Community of Practice, fostering collaboration, exchange of ideas, and shared learning with other sport organizations committed to ocean sustainability.

Interested sport organizations were invited to submit a proposal detailing:

- **Organizational Background:** a brief overview of the organization, including its mission, activities, and commitment to sustainability.

- **Motivation and Objectives:** a statement outlining the organization's interest in joining the Community of Practice, including specific goals for participating.
- **Potential Impact:** an explanation of how the organization plans to incorporate the methodologies and tools provided into its operations and how this could positively impact ocean sustainability.
- **Commitment to Participation:** a declaration of the organization's commitment to active participation in the Community of Practice, including attending meetings, engaging in discussions, and sharing experiences and best practices.

### Webinar 1: Launching the Community of Practice

Ocean Literacy and Environmental Tools in Sport - *on 3rd March 2025*

The first Community of Practice webinar focused on building a shared understanding of ocean literacy and exploring tools for environmental action within sports communities. The session opened with an introduction to the concept of ocean literacy by Dominika from EMSEA, who emphasized its foundational role in climate awareness, behavioral change, and sustainability. She illustrated the public's general lack of knowledge about ocean systems and highlighted the importance of education to counteract common misconceptions.

Following this, the Surfrider Spain presented a set of practical tools designed to help sport clubs and organizations implement sustainable practices. These included a Good Practices Handbook, the Changing Ocean Report, and a toolkit featuring instruments such as the Forel-Ule scale for water clarity, Secchi disks, hydrophones for detecting underwater noise pollution, and biodiversity monitoring charts.

The session then opened up for participants to share local case studies from their own contexts. These contributions ranged from kayaking clean-ups in Malta to community surf programs in the Philippines, and included insights into national environmental policies, local challenges like plastic pollution, and emerging nature-based solutions such as sea grass and sea rack planting in Denmark.

The conversation revealed a recurring theme: while many organizations are already engaged in environmental efforts, there is a strong need for structured support, peer exchange, and the adaptation of methodologies to local realities.

To close the session, participants were invited to reflect on a local environmental issue they wished to address within their community. This exercise served as preparation for the second webinar, where these issues would be explored in greater depth through collective strategy development.

## Webinar 2: Deepening the Dialogue and Strategy Sharing Strategies for Action and Local Engagement - on 2nd April 2025

The second webinar was built on the outcomes of the first, with a focus on the strategic application of ocean literacy and sustainability principles in local settings. The session began with a recap of the first exchange by Sport & Citizenship, which reiterated the challenges of integrating sustainability into sport and emphasized the emotional, social, and cultural dimensions of ocean literacy.

This was followed by a comprehensive presentation from EMSEA on the evolution of ocean literacy, tracing its growth from a classroom-based concept to a broader movement involving multiple sectors. EMSEA emphasized how emotional connection to the ocean can drive public support for marine protection and highlighted how recreational activities such as scuba diving and surfing can become platforms for environmental education. They also shared findings that coastal communities often see the ocean primarily as a workplace, while non-coastal communities engage with it recreationally, shaping different perceptions and behaviors. The core of the second session featured a round of presentations from participants who shared their ongoing initiatives and strategies.

Through these initiatives, OSES project managed to:

- raised awareness of the importance and complexity of ocean literacy, tailored to sport organizations.
- distributed practical tools and educational materials to help participants implement local eco-initiatives.
- established peer-to-peer mentoring dynamics, with follow-up exchanges encouraged beyond the webinars.
- identified common environmental challenges (e.g., marine litter, lack of infrastructure, lack of awareness) and surfaced localized solutions.
- encouraged intersectoral collaboration between sport actors, NGOs, and policymakers.

The community of practice successfully created a platform for cross-national dialogue and exchange of replicable practices.

An underwater photograph showing a large school of small fish swimming in a clear blue ocean. In the foreground, the dark, textured surface of a coral reef is visible. In the middle ground, two divers are seen swimming away from the camera. In the background, another diver is visible near the surface. The overall scene is serene and highlights the beauty of marine life.

# **RECOMMENDATIONS AND CALLS**

for actions to marine environment, ocean conservation  
and sports organizations, stakeholders and policy makers at local,  
national and european levels

## Special calls

Access to and exposure to the ocean strongly influence individuals' sense of connection and attachment to the marine environment. Ensuring equitable access for all—whether through direct experiences such as water sports, or indirect means such as books, games, virtual reality tools, and other educational resources—should be reinforced and supported by stakeholders at all levels of decision-making. – *EMSEA*

The designation and effectiveness of Marine protected areas (MPA) shall be reinforced, taking into account the ocean sports practices and organizations locally implemented to collaborate on ocean conservation and education - *DAN & Ocean as common*.

Special mention is made by DAN Europe, for the designation and the protection of Cirkewwa, one of the most crowded diving spot in Malta, as Marine protected area.

The ocean shall be recognized as a common good of humanity, allowing general public, practitioners and all the actors involved, to take part in all marine areas and resources governance, in order to ensure their use in sustainable et democratic way - *DAN Europe & Ocean as common*.



## General policy recommendations to allow nautical sports to become a platform for ocean sustainability

FOR ALL LOCAL, NATIONAL, EU POLICY MAKERS  
IN SPORT & MARINE ENVIRONMENT CONSERVATION

### Recognition

- The ocean is not a playground. It is a fragile ecosystem full of life and biodiversity. It shall be considered as such by all ocean sports organizations and practitioners. They shall relate through ocean literacy to all ocean interactions and more specifically to its biodiversity. 98% of the marine living organisms are constituted by micro-biodiversity

The ocean is the blue lung of the Planet, it covers the globe of immense rootless forests of microbial diversity which allow us to breathe and to maintain the atmosphere breathable - *Ocean as common.*

- Ocean sports shall be recognized as catalyst for ocean literacy, sustainability, ocean conservation and awareness raising.

Therefore, ocean and water sports shall be formally acknowledged as drivers of environmental awareness, community engagement, and healthy lifestyles - *Sport and citizenship.*

- Ocean sports allow experiential learning on ocean conservation and promote environmental awareness, notably fostering emotional connections to the ocean - *University of Barcelona.*
- Ocean sports' practitioners shall be recognized as agents of change and marine sports enthusiasts often act as sentinels of environmental change due to their regular presence in marine environments. They demonstrate strong personal bonds with the ocean and can serve as role models for new participants - *University of Barcelona.*
- Local and national water sports clubs and organizations shall play an active role in protecting the marine environment. By strengthening their knowledge, providing them with tools, and fostering collaboration, these groups can be empowered to become key leaders in ocean conservation. Their close connection to the sea positions them uniquely to raise awareness and promote sustainable practices - *Surfrider Spain.*
- Parallely, sport organizations shall support sustainable practices. To this end, sustainability strategies and programs shall be implemented by clubs, federations, and event organizers to adopt environmentally sustainable practices - such as waste reduction, use of renewable energy, sustainable travel, plastic-free events. Funding, technical guidance and incentives for sustainable sport practices shall be provided.
- Taking into account the abovementioned considerations, positive and regenerative impact programs encompassing both marine environment education and actions, shall be

encouraged by European and national stake holders and policy makers, to be developed regarding the specific context and practices, and implemented at local level by ocean sports clubs and organizations - *Ocean as common*

- These concepts and actions in favor of carbon neutral, impact free, positive and regenerative impacts in ocean sports shall be foster and supported by all ocean sports' communities - *Ocean as common*
- In this field, education and capacity building shall be fostered. In particular, training and awareness programs for athletes, coaches, and sport managers on environmental responsibility shall be developed - *Sport and citizenship*.
- Ocean literacy, marine education, and awareness-raising shall be integral components of water sports training, particularly for new practitioners who are just beginning their engagement with marine activities. These individuals may be less aware of the environmental challenges the ocean is currently facing, as well as the potential impacts of their own actions. - *EMSEA*
- As a conclusion, ocean and marine sports shall be integrated into national and EU sustainability and ocean protection strategies - *Sport and citizenship*

#### Foster cross-sector collaboration

- Cross-sector collaboration among policymakers, marine environment educators, sports organizations, and local communities shall be encouraged to integrate marine sports into broader sustainability strategies - *University of Barcelona*.
- In consequence, cross-sector alliances of education, sport, tourism, science stakeholders that foster citizen engagement and education, ocean conservation, shall be promoted and funded - *Begi Bistan*
- In particular, the role of active sustainable tourism and environmental education within environmental policy frameworks, shall be recognized and specific funding lines shall be provided - *Begi Bistan*
- In this sense, long-term funding sport-environment initiatives that bridge environmental education and sustainable tourism sectors, shall be considered - *Green Coast*.

## At European level

As a consequence :

- Ocean sports' schools and organizations shall also be recognized as active ocean education platforms within EU sustainability frameworks - *Sport and citizenship*
- EU-supported initiatives for knowledge sharing, workshops and best practices' dissemination across Member States shall be developed and funded - *Sport and citizenship*
- In general, continued dissemination of Ocean literacy shall be fostered by the EU, notably through existing learning tools and dedicated organizations\* - *DAN Europe*.
- An element of ocean literacy, marine education, and/or environmental awareness should be a mandatory component of all publicly funded water sports programs - *EMSEA*

\*E-learning platform on Ocean Literacy through the DAN Europe Website <https://www.daneurope.org/en/-/unesco-endorses-ocean-literacy-project-by-leading-diving-organisations>

An aerial photograph of a sandy beach with numerous colorful kites scattered across it. The kites are in various colors and patterns, including blue, orange, green, and purple. Some kites are partially inflated, while others are deflated. Small figures of people can be seen on the sand, some appearing to be working with the kites. The beach meets the ocean at the bottom of the frame, with waves breaking onto the shore.

# RECOMMENDATIONS AND CALLS

for sustainability, marine environment & ocean literacy programmes  
within ocean sport clubs to all more specifically for sports clubs &  
organisations, federations and marine environment organisation

## TO ALL AND MORE SPECIFICALLY FOR SPORTS CLUBS & ORGANISATIONS, FEDERATIONS AND MARINE ENVIRONMENT ORGANISATION

### General

- Young generations shall be educated on the marine environment and ocean conservation, notably through citizen science, ocean literacy and regenerative Sports\* - *DAN Europe*.
- Ocean sports offer a great educational potential. Informal education and citizen science initiatives for example, embedded in marine sports can engage diverse audiences, especially youth. Locally grounded programs can integrate geography, ecology, marine science, and social dimensions, enhancing understanding of complex marine systems - *University of Barcelona*.
- As a consequence, recognition and support shall be granted to educational environmental programs for ocean sports communities - *University of Barcelona*.
- Each sport offers distinct perspectives, from underwater ecosystems - while diving - to wave dynamics - while surfing or kayaking - and weather patterns - when sailing - *University of Barcelona*.
- It is reminded that all themes developed in “Changing Ocean - OSES report on the state of the ocean and European seas and on ocean literacy and Sport”, which are biodiversity conservation, climate change, global coastal processes, litter and plastic pollution, are threats of equal importance and shall be addressed in educational programs, tools kits and interventions - *University of Barcelona*.
- The dissemination of awareness rising on climate change shall be continue and the topic of invasive non-indigenous species shall also be address, notably as a threat for the Mediterranean Sea - *DAN Europe*.

## Key of success change & education programmes

- **Sustainability, marine environment and ocean literacy programmes** shall be integrated education and sessions within the usual practices and learning activities and process of the trainees, not becoming "green" sessions as such. In parallel, "green" sessions and training could also be developed as specific offers to an already interested public. - *Ocean as common*
- **The knowledge of ocean, its mechanisms, and its biodiversity**, shall be a part of the "sea sense" together with other skills taught, such as the meteorology, streams, safety rules, navigation etc... - *Ocean as common*
- **Change is not a moment, a one-shot action. It is a process.** Long-term change and transition programmes integrating sustainability, marine environment and ocean literacy, shall be developed encompassing all actions needed to fully implement the evolution seek, together with the necessary milestones and timelines. *Ocean as common*
- **Internal commitment** of clubs to sustainability and the integration of environmental values in water sports as well as within ecotourism offers, shall be reinforced - *Begi Bistan*.
  - To facilitate this, partnerships could be established between local schools and clubs, municipal authorities and European observers, fostering multi-stakeholder cooperation - *Green Coast*.
- Sports clubs should be actively involved in ocean conservation by educating and training their instructors and the participants they host during their activities. As frequent users, these clubs possess knowledge of their "playground," including which areas are most vulnerable or which seasons tend to show higher levels of pollution. — *Surfrider Spain*.
- Ocean preservation and literacy education shall be carried out by internal trainers within the sport clubs. It is thus important to focus on training of these trainers on all ocean conservation's themes - *University of Barcelona*.
- it shall be thus Invested in instructors training to address knowledge gaps and reinforce Ocean literacy principles - *University of Barcelona*.

## Ocean Literacy

- Ocean literacy shall be integrated into non-formal education through water sports, promoting knowledge, awareness and behavioral change among young people and other practitioners - *Green Coast*.
- Ocean literacy among young people and professionals shall be promoted and notably reinforced through direct contact the natural environment - *Begi Bistan*.
- Long-term ocean literacy programmes shall be fostered in schools and youth services, ensuring continuity beyond one-off activities shall be supported - *Begi Bistan*.
- Ocean literacy shall be included in national curricula, especially in coastal and tourism-heavy regions - *Green Coast*

## About ocean literacy and water sports

by EMSEA

Ocean literacy (OL) emerged in the early 2000s in the US as a framework to enhance public understanding of the ocean's fundamental processes and its interconnections with the atmosphere and the Earth system. An ocean-literate person is one who recognizes the ocean's influence on their daily life, can communicate meaningfully about ocean issues, and makes informed, responsible decisions to ensure the ocean continues to sustain life on Earth. Its core message is encapsulated in the tagline:

Ocean literacy is the understanding the ocean's influence on you, and your influence on the ocean. In the context of water sports, integrating ocean literacy into training and practice is essential. Embedding OL in water sports education can sensitize athletes, instructors, and enthusiasts to the importance and fragility of aquatic environments. By understanding their potential impact - whether direct or indirect - water sports practitioners can minimize harm and contribute actively to ocean stewardship. Ocean literacy thus becomes a vital means of ensuring that all new water sports participants interact responsibly with marine ecosystems.

Since its inception, the concept of ocean literacy has evolved significantly. Initially focused on knowledge and awareness, OL has since been reframed as a comprehensive approach encompassing conservation, protection, and sustainable management of ocean resources.

Brennan et al. (2019) proposed a six-dimensional model that reflects the multifaceted nature of ocean literacy, including:

1. Awareness
2. Knowledge
3. Attitude
4. Communication
5. Behavior
6. Activism

This model was later expanded by McKinley et al. (2023), who introduced four additional dimensions to capture a broader spectrum of human-ocean engagement:

7. Emotional connection
8. Access and experience
9. Adaptive capacity
10. Trust and transparency

Together, these ten dimensions represent a holistic view of OL that integrates cognitive, emotional, behavioral, and social elements shaping how individuals and communities relate to the ocean.

Within this framework, water sports serve as a powerful pathway to enhance ocean literacy across European society. Engaging in marine and freshwater activities - such as sailing, surfing, kayaking, diving, swimming, or coastal recreation - creates direct and meaningful interactions with aquatic environments. These experiences foster deeper understanding, emotional connection, and place

attachment, while promoting attitudes and behaviors supportive of marine conservation (Ainsworth et al., 2019; Kelly et al., 2022).

By facilitating experiential learning, water sports not only strengthen physical and mental well-being but also cultivate empathy, respect, and advocacy for ocean protection. Practitioners, through their visibility and community engagement, have the potential to become influential ocean ambassadors - promoting sustainable practices, raising awareness, and inspiring collective responsibility toward preserving our marine ecosystems.





# RECOMMENDATIONS AND CALLS

For toolkits and interventions development

## Assessment needs

- Surveys are particularly advantageous for offering both quantitative and qualitative data and may prove valuable to assess knowledge and awareness on the ocean\*.
- Results of the surveys show that while instructors showed high awareness of ocean and climate issues, knowledge gaps remain. Addressing these through targeted training can strengthen their confidence and effectiveness in promoting ocean literacy. In addition, instructors expressed interest in further marine-related education and recognized water sports as a powerful medium for raising ocean awareness - *University of Barcelona*.

## About designing

- Nautical sports clubs and organizations to develop their own marine environment methodology and toolkit inspired by the OSES project. OSES project has created resources to this end, together with experiences and feedback of the OSES pilot interventions on the field. In this sense, designing, planning, supervising and ensuring field interventions of sports clubs could be developed following these inputs and methodologies - *Surfrider Spain*.
- Such projects, their kits and the associated knowledge shall be adapted to each sport, each age and the local context of each club - *University of Barcelona*.
- Flexibility shall be allowed in developing, implementing, enabling partners to adapt formats, language and tools to local realities - *Begi Bistan*.
- Co-creation of tools and protocols shall be flexible, inclusive, and adaptable to different local realities — especially in non-formal learning environments, shall be facilitated - *Begi Bistan*.
- Equipment usability shall be key and taken into account, notably the design of lighter, modular sampling kits, and include the training for educators in their use - *Begi Bistan*.
- To this end, the design of the kits and other tools shall involve interactions with clubs' trainers - *University of Barcelona*.
- Environmental actions and interventions require an appropriate timeline that allows for both identifying the target group and conducting field activities. For example, a local sports centers may implement environmental actions over the course of a month, with additional time allocated for gathering feedback from participants. - *EMSEA*
- During their development, tools testing shall be also allocated the necessary time for deep testing by large groups of testers - *EMSEA*.
- Robust backup plans for outdoor sessions, including indoor activities that maintain the project's spirit, shall be designed- *Begi Bistan*.

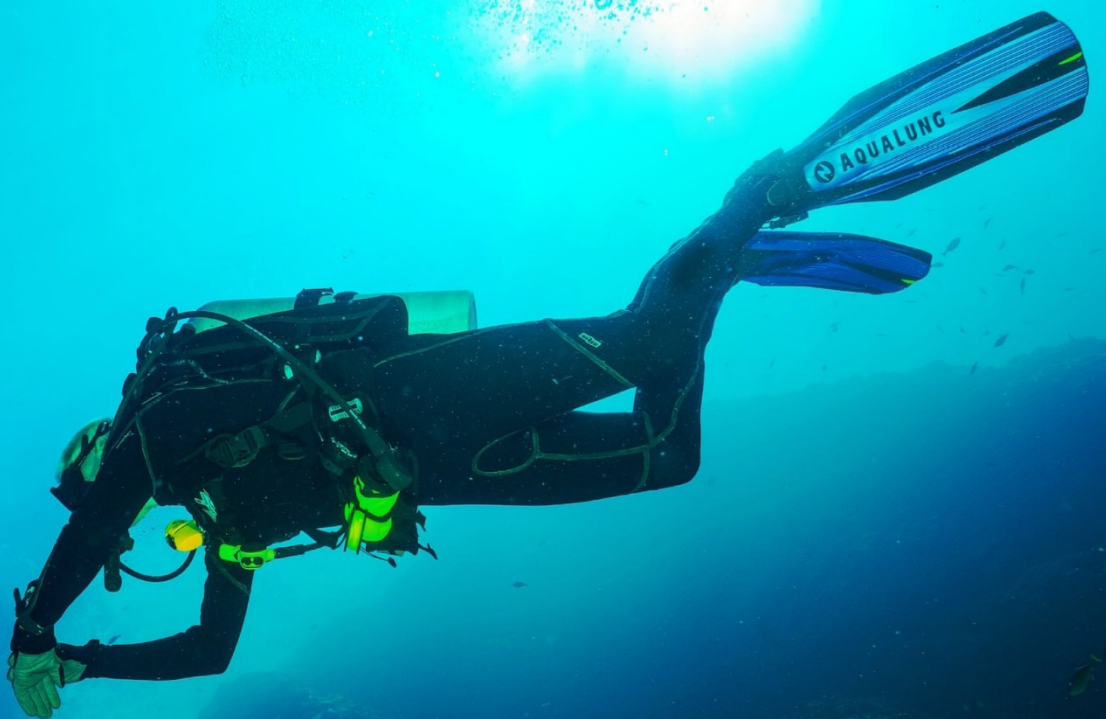
## Using the tool

- Tool kits and the methodologies used shall be integrated in the clubs' daily activities, when possible, to create a greater impact - *Surfrider Spain*.
- Continuity shall be ensured by creating follow-up materials - for example, newsletters, repeatable modules, or year-round engagement packs for schools - *Begi Bistan*.
- A shared online platform and knowledge database should be established to collect and disseminate tools, activity ideas, and good practices. This resource would enable stakeholders to contribute materials and allow sports organizations, clubs, and other relevant actors to easily access and apply them—whether to take their first steps toward sustainability or to further advance their existing efforts. - *EMSEA*

#### Evaluation and assessment

- Particular attention shall be paid to assess and evaluate the educative path and knowledge transmitted - *University of Barcelona*.
- Evaluation tools, such as, for example, the use of digital quizzes or visual cards, shall be simple and adapted to different age groups - *Begi Bistan*.
- Educational methodologies shall also be improved by testing new tools, with games or interactive dynamics, and adapted to real conditions - *Begi Bistan*.
- The OSES pilot interventions, conducted across diverse European coastal regions - Atlantic coast of Normandie and Portugal, Cantabrian coast, and Mediterranean -, involved four water sports and varied audiences, and surveys proved to be the most effective tool for evaluating educational interventions and communication outcomes - *University of Barcelona\**.

\* *Report on the Assessment of the needs and diagnoses for pilot interventions in OSES' -Case Studies - Begona Vendrell-Simon, Anna Sanchez-Vidal, Oriol Uviedo - Facultat de Ciències de la Terra - Universitat de Barcelona, Idoia Fuertes - Surfrider Spain*



# RECOMMENDATIONS AND CALLS

For citizen science interventions and scientific data sharing

- Citizen science and community-based monitoring through water sports shall be promoted - *University of Barcelona*.
- Institutional support shall be granted to local stakeholders to create citizen science networks with effective data collection and environmental indicators - *Green Coast*.
- The development of citizen science for ocean sports shall be secure *via* funding, allowing the necessary time for training of the trainers on environmental issues - *La Vague normande*.
- Data collection and sharing shall be ongoing process between clubs and universities and other scientific institutions. To this end, networks shall be built between research centers and sports clubs to assess the status of the marine environment through citizen science. This network is very important and should be considered key to develop good data collection, considering the strength of each entity. - *Surfrider Spain*.
- In this sense, collaboration between environmental educators, sports professionals, and scientific institutions shall be strengthened - *Begi Bistan*.
- Awareness on plastic pollution and citizen science practices - via kayaking for instance - and microplastic sampling, shall be reinforced - *Begi Bistan*.
- Alert systems shall be promoted - for instance, through mobile applications - enabling sports organizations to register every issue related to marine litter pollution, oil spill, etc. These alerts shall reach first local administrations, national governments and finally the European Commission - *Surfrider Spain*.

## Focus on pollution alerts & citizen science tools

BY Surfrider Spain

### MACRO LITTER

Diving and snorkeling à Information about the steps to follow, the requirements and the datasheet can be found in Dive Against Debris [website](#).

For beaches, kayaking, sailing, ... : Surfrider Foundation Europe developed a program called [Ocean Initiatives](#) where anyone can organize or join a waste collection. The protocol, guide and materials can be found in the website.

### MICROPLASTICS IN BEACHES

Sea observers offer a variety of projects where data can be uploaded. In this case we have chosen the project [Microplastic watchers](#) which has plenty of documentation to learn how to sample and collect microplastics.

### WATER QUALITY

Forel-Ule and Secchi disk: there is no existing application but there are programs of participative science measuring water quality: [European Citizen Science Platform](#), [Great UK WaterBlitz - Earthwatch Europe](#), etc.

Compaq lab kit: the protocol used by DAN Europe can be found in this [link](#) and the data can be uploaded through this [form](#).

### PROTECTION OF BIODIVERSITY

Initiatives can be found on INaturalist, observation.org or eBird

DAN Europe uses its own protocol for biodiversity which is called Visual Census. There is more information in their [website](#), with a video tutorial and also the possibility to download the protocol. Data can be uploaded in the Sea Observers website in the [Climate Fish section](#).

### CLIMATE CHANGE

There is no existing application for this topic either, it could be interesting for each sports club to keep a record of the water temperature during their daily activities for awareness among their public or to share it with an interested stakeholder (University).

### COASTAL PROTECTION AND MANAGEMENT

Coastsnap is a global citizen science project to capture changing coastlines. Relies on repeat photos at the same location to track how the coast is changing over time due to processes such as storms, rising sea levels, human activities and other factors. It turns photos into valuable coastal data that is used by coastal scientists to understand and forecast how coastlines might change in the coming decades. It is a mobile phone application and more information can be found in their [website](#).



# OSES

OCEAN SUSTAINABILITY THROUGH  
EDUCATION AND SPORT

Find out more about OSES

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