

INNOVATING FOR THE OCEAN



2023/2024
ACTIVITY
REPORT



Climate change is accelerating, and the collapse of biodiversity is intensifying, jeopardizing the balance of our planet and the resilience of our societies. In the face of these unprecedented challenges, the ocean plays a key role: it regulates the climate, harbors exceptional biodiversity, and serves as a vital source of life and innovation. Yet, it is bearing the full brunt of human activities.

At Pure Ocean, we believe that science and innovation are powerful drivers of action. By supporting ambitious research projects worldwide, we help to better understand, protect, and restore marine ecosystems. Thanks to the commitment of our community of donors, researchers, and ocean enthusiasts, we are moving forward together toward a more sustainable future.

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The past year has been marked by major breakthroughs, strengthened partnerships, and inspiring projects. But there is still a long way to go, and we must intensify our efforts to preserve this vital ecosystem. In a world where societal polarization threatens our ability to act collectively, it is crucial to unite around shared values. Now more than ever, the time is for action and unity so that the ocean—our invaluable common good—remains a source of life for future generations.

David Sussmann,
President and Founder of Pure Ocean

KEY FIGURES



Record-Breaking Year for the Call for Projects

A total of **173 project proposals** from **49 countries** were received as part of the 2023 Call for Projects—a record for Pure Ocean.



Support for 7 New Scientific Projects

Selected for their impact and scientific excellence, these projects address key areas such as marine pollution reduction, ecosystem protection, and advancing ocean knowledge.



2023 Ocean Gala: An Exceptional Event

On June 8, 2023—World Ocean Day—Pure Ocean hosted its second Ocean Gala on the terrace of the Mucem in Marseille, bringing together **170 committed donors**. The evening featured a prestigious dinner and an auction, all dedicated to innovation for ocean conservation.



Record Participation in the “La Goutte Bleue” Corporate Challenge

Through the “La Goutte Bleue” initiative, businesses and citizens united to protect the ocean, resulting in the collection of **44,550 liters of waste** in 2023.



24H Pure Ocean: A Record-Breaking Fundraiser

The third edition of 24H Pure Ocean **raised €16,650** with the participation of **10 boats**, surpassing the previous year’s record.



Launch of the Erasmus+ Project: “Sharing Ocean Science for Responsible Business”

Pure Ocean has launched the “Sharing Ocean Science for Responsible Business” initiative, bringing together scientists and economic stakeholders to foster dialogue between business and science, aiming to shift practices toward a sustainable model.

28 INNOVATIVE RESEARCH PROJECTS AROUND THE WORLD



**UNDERSTAND AND COMBAT
MARINE POLLUTION**

6 projects



**PROTECT AND RESTORE MARINE
ECOSYSTEMS AND BIODIVERSITY**

7 projects



BUILD RESILIENCE AND ADAPT TO CLIMATE CHANGE AND ITS EFFECTS
7 projects



IMPROVE OUR GLOBAL UNDERSTANDING OF THE OCEAN-SYSTEM
8 projects

Pure Ocean's core mission is to fund innovative and ambitious scientific projects to preserve and restore marine biodiversity and ecosystems. Since its creation, Pure Ocean has launched five international calls for projects, attracting proposals from universities, research institutes, and NGOs. The projects selected and funded by Pure Ocean are exclusively led by nonprofit organizations serving the public interest.

PURE OCEAN, INNOVATING FOR THE OCEAN

OUR 3 PILLARS



SUPPORT INNOVATIVE
APPLIED RESEARCH
PROJECTS AROUND
THE WORLD



MOBILIZE ECONOMIC
ACTORS AND CIVIL SOCIETY
AROUND OCEAN
PROTECTION



RAISE AWARENESS
AND ALERT PEOPLE
TO THE NEED TO
PRESERVE THE OCEAN

2023 CALL FOR PROJECTS

CFP 2023

- 173 candidate projects
- 49 countries
- 7 selected projects

CFP 2022

- 72 candidate projects
- 28 countries
- 6 selected projects

CFP 2021

- 40 candidate projects
- 24 countries
- 5 selected projects

CFP 2020

- 159 candidate projects
- 40 countries
- 4 selected projects

CFP 2018

- 65 candidate projects
- 21 countries
- 6 selected projects

Seven innovative research projects have been selected by Pure Ocean's Scientific Committee for their impact, scientific excellence, and contribution to the major environmental challenges defined by the United Nations. The projects supported in 2024 aim to restore marine ecosystems, protect biodiversity, understand the effects of climate change, and reduce marine pollution through cutting-edge approaches combining technology, social sciences, and ecology.

4 SELECTION CRITERIA

Co-construction - Reflecting interdisciplinarity or transdisciplinarity, collaboration, and knowledge-sharing among diverse stakeholders.

Commitment - Demonstrating passion and determination by bringing together all relevant and realistic resources to drive effective global change.

Innovation - Enhancing our interaction with the planet by developing new visions, techniques, and methods.

Impact - Aligning with the priority themes of the call for projects, with clearly defined short-, medium-, and/or long-term impacts (quantitative, qualitative, and intangible).

THE SCIENTIFIC COMMITTEE AT THE HEART OF PROJECT SELECTION

The Scientific Committee plays a central role in selecting the scientific projects supported by Pure Ocean. Composed of five world-renowned ocean and climate researchers, the committee validates the annual call for projects (AAP) and evaluates numerous applications to determine the final shortlist of winners. In 2023, the committee selected six winning projects out of 72 applications submitted for the fourth AAP, which closed on November 15, 2022.



Gilles Bœuf,
France

Professor at UPMC. Specialist in "integrative biology of marine organisms" at the Arago laboratory in Banyuls-sur-mer. Former President of the National Museum of Natural History. President of the Scientific Council of the French agency for biodiversity.



Abdelmalek Faraj,
Morocco

Doctor of the école des MINES ParisTech in geostatics and fisheries management. General Director of the Moroccan National Institute for Halieutic Research (INRH). President of African Institutes Network for Fisheries Research and Marine Sciences (RAFISMER).



Kartik Shanker,
India

Professor, teacher-researcher at the Indian Institute of Science in Bangalore, expert in the distribution and diversity of flora and fauna in terrestrial and marine eco-systems. Founder trustee of Dakshin Foundation, a coastal and marine conservatio NGO. Former President of the International Sea Turtle Society and Regional Vice-Chair of the IUCN.



Anna Zivian,
United States

Expert in environmental policy, democracy, and participatory science. Former Associate Director of the Knowledge Management Program at Ocean Conservancy (Washington, DC) and Senior Manager of the Ocean Planning Program from 2009 to 2013.

The projects supported by Pure Ocean in previous calls for proposals have led to significant scientific and environmental advancements:

- Uncovering the potential of sea sponges in breaking down and “treating” microplastics in the ocean, including the identification of plastic-eating enzymes.
- Developing innovative approaches for coral reef restoration.
- Enhancing knowledge of marine ecosystems and their responses to climate change.
- Engaging local communities in long-term conservation programs.

These results highlight the importance of supporting applied research and the urgent need to accelerate ocean preservation efforts.

SUPPORTING INNOVATIVE PROJECTS, WHAT IMPACT?

A LOOK BACK AT TWO PROJECTS

REEF REBORN, RESTORING THE GREAT BARRIER REEF

The research team has developed a lipid cocktail for feeding coral larvae that increases their survival rate by 46% and boosts their thermal resilience. The experiment, carried out in situ on 3 million baby corals, is a scientific success: over 100 hectares of the Great Barrier Reef, more than 5,000 corals have been successfully transplanted, preserving essential genetic diversity. This ground-breaking innovation for the ecological restoration of coral reefs has been selected by the Australian government and is already becoming an international reference model.

University of Technology, Sydney, Australia
Pure Ocean 2022 Winner



SHAMA, FROM THE OCEAN TO THE PLATE

At Shark Fin in Palawan (Philippines), the food security of the local population is totally dependent on the health of the bay's ecosystem. The Sulubaaï Foundation has created a network of 4 self-managed marine protected areas by bringing together local fishermen, scientists and local authorities. Four fishermen have been trained in diving and scientific data collection, which began in early 2023. A socio-economic survey was carried out in 5 local villages (7134 inhabitants) to analyze the link between fishing and fish consumption. This scientific follow-up, shared with local stakeholders (200 people), demonstrated 1/ the effectiveness of protecting underwater habitats to increase biomass 2/ for 2 villages, the food risk associated with exporting the majority of fishing catches (>80%). In 2024, scientific recommendations (restrictions on the fishing gear used, control of fish and export prices, etc.) will be shared and debated at participatory workshops with local populations. This regenerative, participatory research-action program is considered a replicable model by the Philippine authorities.

Sulubaaï Foundation, Palawan, Philippines
Pure Ocean 2022 Winner



REGEN OCEAN FARMS

RESTORING COASTAL ECOSYSTEMS AND REVITALIZING THE LOCAL ECONOMY THROUGH SUSTAINABLE SEAWEED FARMING



BRAZIL

Brazilian coastlines are under increasing pressure from over-fishing, climate change, and pollution. This project aims to develop a sustainable seaweed farming sector, blending traditional knowledge with biotechnological innovations to restore coastal ecosystems.

By involving local communities in responsible seaweed production, the project contributes to the regeneration of marine habitats while creating sustainable economic opportunities. It will serve as a replicable pilot model for other regions worldwide.

WHAT MAKES THIS PROJECT INNOVATIVE?

Regen Ocean Farms revitalizes Brazilian seaweed farming through modern biotechnological processes to restore coastal ecosystems. By combining economic development and conservation, this project offers an innovative and sustainable approach to marine preservation.

PROJECT LEADER & SCIENTIFIC PARTNERS

- **Francimeire Costa**
CResearcher at the Bonfarto Kaj Konservado Institute (BKK)
- **Prof. Wagner Cotroni Valenti**
Researcher in algoculture at the Universidade Estadual Paulista (UNESP)
- **Roberto Favero**
Innovation Director, BKK Institute
- **Prof. Michele Spier**
Bioplastics researcher at Universidade Federal Do Parana (UFPR)
- **Prof. Adibe Abdalla**
Researcher in anti-methanogenic materials at CENA USP



PLUME

ASSESSING THE IMPACT OF POLLUTANTS AND SEDIMENTS ON VIETNAMESE ESTUARIES



VIETNAM

The river plumes of major estuaries are crucial biodiversity zones but are under significant anthropogenic pressure.

This project aims to quantify the flow of pollutants, water, and sediments in three Vietnamese estuaries to better understand their impact on local ecosystems and propose solutions to strengthen their resilience against human pressures.

WHAT MAKES THIS PROJECT INNOVATIVE?

Plume stands out for its interdisciplinary approach to studying pollutant flows in Vietnamese estuaries and their socio-ecological impacts. By combining environmental science with community collaboration, this project aims to inform marine conservation policies. Pure Ocean supports Plume for its commitment to understanding and protecting vulnerable coastal ecosystems.

PROJECT LEADER & SCIENTIFIC PARTNERS

- **Marc Tedetti**
IRD Researcher, Mediterranean Institute of Oceanography (MIO)
- **Vinh Duy Vu**
Physical oceanography at the Institute of Environment and Marine Resources in Vietnam
- **Sylvain Ouillon**
Researchers at the Laboratoire d'Etudes en Géophysique et Océanographie Spatiales, Toulouse, France

MICROCEAN

SOCIAL
INNOVATION



TECHNOLOGICAL
INNOVATION



DECODING THE ROLE OF OCEANIC MICROORGANISMS IN CLIMATE REGULATION



GLOBAL OCEAN

Plankton plays a key role in the biological carbon pump, absorbing a significant portion of atmospheric CO₂. However, the diversity and interactions of oceanic microorganisms remain poorly understood.

This project aims to sequence the genome of key plankton species and analyze their connections to climatic and ecological processes. This research will help better anticipate the impacts of climate change on deep-sea ecosystems.

WHAT MAKES THIS PROJECT INNOVATIVE?

By combining marine microbiology with social psychology, the Microcean project broadens our understanding of human-plankton interactions. Pure Ocean supports the project for its holistic approach to oceanic research and its potential to raise awareness of the importance of preserving these ecosystems.

PROJECT LEADER & SCIENTIFIC PARTNERS

- **Pauline Lecoq**
Doctoral student in microbial oceanography at the Mediterranean Institute of Oceanography (MIO)
- **Fanny Karatchodjoukova**
Scientific mediator and doctoral student in environmental psychology, Laboratoire de psychologie sociale (Aix-en-Provence) and Mediterranean Institute of Oceanography (MIO)
- **Christian Tamburini**
PhD in microbial oceanography of the intermediate and deep ocean domains at the Mediterranean Institute of Oceanography (MIO)
- **Vincent Lombard**
Research engineer at the AFMB laboratory in the Glycogenomics team
- **Raquel Bertoldo**
Social psychologist at the Laboratoire de Psychologie Sociale d'Aix-en-Provence and Associate Professor at the University of Aix-Marseille

ANTARCTIC BIOLUM

TECHNOLOGICAL
INNOVATION



EXPLORATORY
INNOVATION



OBSERVING DEEP-SEA MACROFAUNA THROUGH NATURAL BIOLUMINESCENCE



NEW ZEALAND

The deep Antarctic remains one of the least explored ecosystems on the planet. This project leverages innovative technology to observe and analyze the bioluminescent signals emitted by abyssal organisms.

Using a 360° detection system, researchers will map the diversity of species living in these extreme environments and better understand their ecological interactions. This knowledge is crucial for supporting the protection of Antarctic deep-sea habitats, which are increasingly threatened by resource exploitation.

WHAT MAKES THIS PROJECT INNOVATIVE?

By using bioluminescence as a means of communication with deep-sea marine species, researchers can interact with them without resorting to capture or baiting, which disrupts communities. This project opens new perspectives for understanding and preserving these unknown ecosystems, already at risk from deep-sea mining.



PROJECT LEADER & SCIENTIFIC PARTNERS

- **Dr Thomas Linley**
Marine biologist at the Museum of New Zealand Te Papa Tongarewa
- **Katherine Bolstad**
EAssociate professor at Auckland University of Technology
- **Patricia Esquete Garrote**
Researcher at the University of Aveiro, Portugal
- **Eulogio H. Soto Oyarzún**
Marine biologist at the University of Valparaíso, Chile

BUFFER

TECHNOLOGICAL
INNOVATION



NATURE-BASED
INNOVATION



RESTORING RED GORGONIANS AGAINST MARINE HEATWAVES IN THE MEDITERRANEAN



MARSEILLE

Increasingly frequent marine heatwaves are endangering red gorgonians, which form underwater forests that shelter exceptional biodiversity in the Mediterranean.

This project conducts advanced genetic analysis to identify individuals most resistant to thermal stress and support their restoration in the Calanques National Park. Scientific tools and management recommendations will be developed to guide conservation policies in the Mediterranean.

WHAT MAKES THIS PROJECT INNOVATIVE?

Buffer stands out for its advanced scientific approach aimed at understanding and restoring the fragile red gorgonian ecosystems in the Calanques National Park. By combining genetics from resilient colonies with studies on symbiotic microorganisms, this project paves the way for new marine conservation strategies. Pure Ocean supports Buffer for its commitment to developing innovative solutions to protect endangered marine habitats.

PROJECT LEADER & SCIENTIFIC PARTNERS

- **Jean-Baptiste Ledoux**
Marine biology researcher at the Interdisciplinary Centre of Marine and Environmental Research CIIMAR
- **Didier Aurelle**
Associate professor at the Mediterranean Institute of Oceanology (MIO)
- **Bastien Mérigot**
Associate professor at the University of Montpellier, UMR - MARBEC Laboratory
- **Joaquim Garrabou**
Senior Researcher, Institut de Ciències del Mar, Spain

BYCATCH & BEYOND



ENGAGING FISHERS IN THE PROTECTION OF THREATENED SPECIES IN THE BAY OF BENGAL



BANGLADESH

Accidental captures of cetaceans and sharks threaten marine biodiversity. This project develops a low-tech radio-GPS device that allows artisanal fishers to report the presence of protected species in real-time and reduce accidental catches.

The initiative will establish a network of fishers as active participants in marine conservation and provide essential data to improve fisheries management and the protection of endangered species.

WHAT MAKES THIS PROJECT INNOVATIVE?

This project stands out for its participatory and technological approach to reducing bycatch of sharks and cetaceans in the Bay of Bengal. By distributing radio-GPS devices to artisanal fishers, Bycatch & Beyond collects valuable data for more sustainable fishing. Pure Ocean supports this project for its technological and social innovation and its potential impact on the preservation of threatened marine species.

PROJECT LEADER & SCIENTIFIC PARTNERS

- **Alifa Bintha Haque**
Assistant Professor in Zoology at the University of Dhaka
- **Alasdair Davies**
Director, Arribada Initiative

SYNSEN

NATURE-BASED
INNOVATION



UNDERSTANDING THE EFFECTS OF MICROPLASTICS ON THE GENETICS OF SEABIRDS



AUSTRALIA

The ingestion of microplastics has become a global threat to marine wildlife. In Australia, some seabird species are developing an emerging disease called plasticosis, a chronic inflammation caused by consuming microplastics.

The Synsen project aims to characterize the consequences of plasticosis on DNA and model its effects on cellular aging in seabirds. The goal is to better understand the impacts of plastic pollution on marine ecosystem health and to urge policymakers to regulate this pollution.

WHAT MAKES THIS PROJECT INNOVATIVE?

Synsen stands out for its exploration of the links between microplastic exposure and neurodegenerative diseases in seabirds. By combining ecotoxicology research with environmental health studies, this project sheds light on the risks for marine wildlife and human health. Pure Ocean supports Synsen for its innovative approach to understanding and mitigating the impacts of plastic pollution on both marine ecosystems and human well-being.

PROJECT LEADER & SCIENTIFIC PARTNERS

- **Jack Rivers-Auty**
Lecturer in Biomedicine at the University of Tasmania and researcher at the Adrift Lab
- **Dr. Jennifer Lavers**
Marine ecotoxicologist at Adrift Lab and adjunct Lecturer at Charles Sturt University
- **Dr. Alex Bond**
Principal Curator of Birds, Biologist and ecologist at the Adrift Lab (Tasmania) and based at the National Museum of Natural History, UK
- **Alix de Jersey**
PhD Candidate at the Adrift Lab, Tasmania

An underwater photograph showing a dense field of green seagrass in the foreground and middle ground. A small, dark fish is visible swimming through the seagrass. The background is a clear, deep blue ocean. The text is overlaid on the upper portion of the image.

**“THE OCEAN IS THE PLANET’S LUNGS,
OUR LIFE INSURANCE.
PROTECTING IT IS VITAL!”**

**David Sussmann,
President and Founder of Pure Ocean**

PURE OCEAN, GOVERNANCE & ORGANIZATION

The Pure Ocean endowment fund was established in January 2019 by committed entrepreneur David Sussmann. It is a general-interest legal entity recognized by the French tax authorities. As such, the Pure Ocean endowment fund is authorized to receive donations (patronage) and issue tax receipts. Its core mission is to select and fund innovative and ambitious research projects to preserve biodiversity and fragile marine ecosystems. In addition, the organization focuses on two other key areas:

- Raising awareness and alerting the public to the urgency of ocean preservation.
- Engaging economic players and civil society in the protection of the ocean.

The Pure Ocean association was created in 2017. As the initiative developed, this associative legal structure proved useful for carrying out revenue-generating activities, with profits reinvested into the endowment fund. The Pure Ocean association manages projects such as La Goutte Bleue, the Climate Fresk, and conferences.

PURE OCEAN GOVERNANCE

Composed of 3 members, the Board of Directors defines the strategic direction of the endowment fund and oversees its operational action.

David Sussmann, Chairman
Eric Neuplanche, Treasurer
Olivier Richardson, Secretary

PURE OCEAN OPERATIONAL TEAM

Pure Ocean is managed by Thomas de Williencourt. It has a staff of 9, including 6 salaried employees.

The Grand Ouest branch is headed by Alain Marguillier, an executive with the Arkea-Crédit Mutuel group, who chose Pure Ocean as part of a skills sponsorship.

SCIENTIFIC COMMITTEE

The scientific committee is composed of 4 renowned ocean and climate experts:

Gilles Bœuf,
Abdelmalak Faraj,
Kartik Shanker,
Anna Zivian.

It plays a central role in the selection of scientific projects supported by the NGO (see p7).



FINANCIAL REPORT



REVIEW & FUTURE PERSPECTIVES

The 2023-2024 period marked a new phase in Pure Ocean's growth. Thanks to donations and support from its patrons, the organization funded seven new scientific projects and reinforced its commitment to ocean conservation.

Looking ahead, Pure Ocean has set ambitious goals:

- Expanding support for research and innovation related to marine challenges.
- Continuing awareness campaigns and mobilization efforts.
- Strengthening collaboration with businesses and institutions to accelerate the emergence of sustainable solutions.

Pure Ocean's commitment to ocean research and protection continues to grow. The organization aims to support more scientific initiatives and mobilize an increasing number of stakeholders to tackle the major challenges facing the ocean.

PURE OCEAN ENDOWMENT FUND FINANCIAL SUMMARY 2023-2024

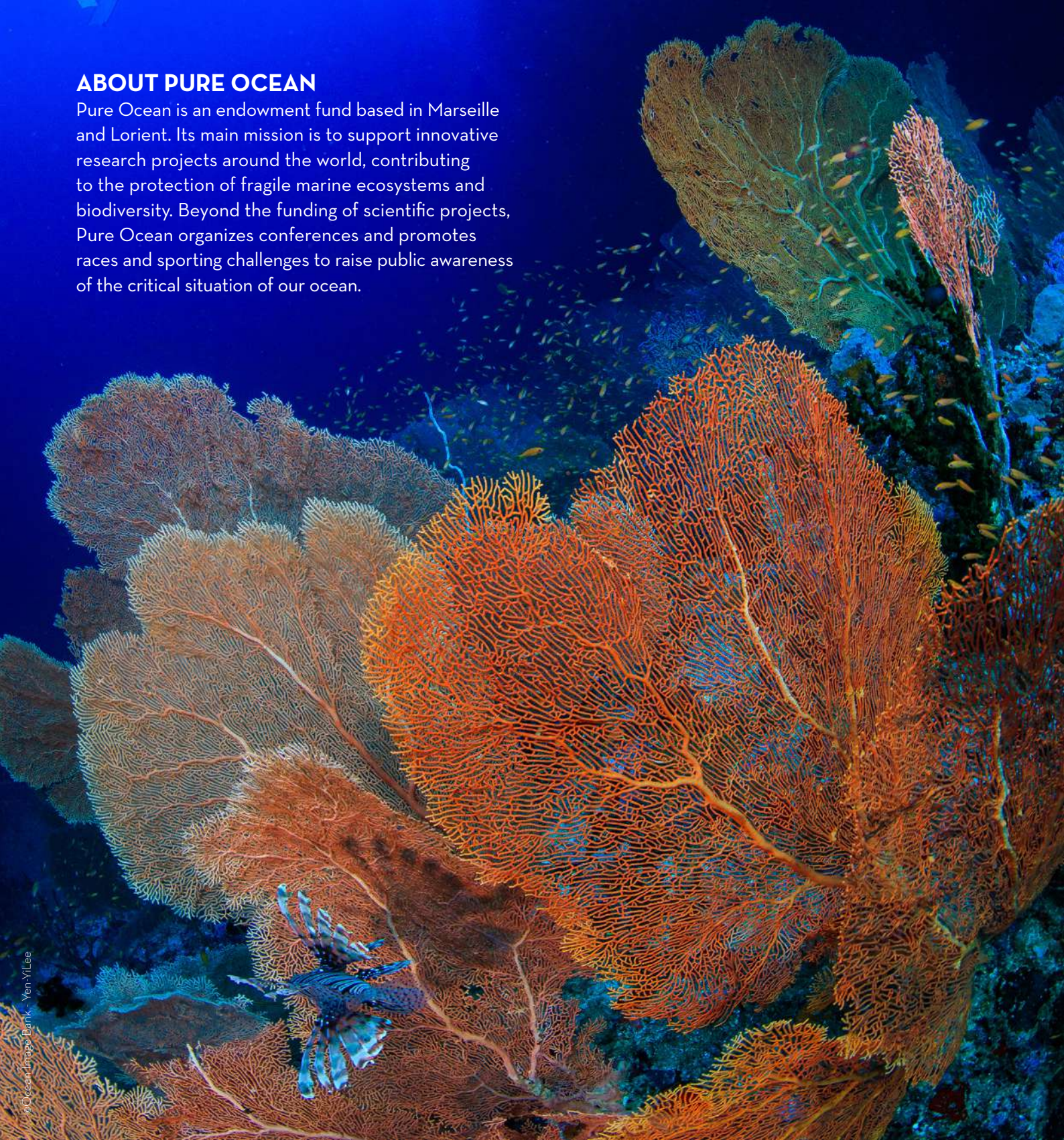
EXPENSES		RESOURCES	
SCIENTIFIC PROGRAMS & AWARENESS-RAISING	353 237 €	RESOURCES COLLECTED FROM INDIVIDUALS	86 522 €
COMMUNICATION & MOBILIZATION	317 936 €	RESOURCES COLLECTED FROM PRIVATE PARTNERSHIPS	746 589 €
FUNDRAISING & PARTNER SEARCH	152 088 €	OTHER PRODUCTS	4 027 €
OPERATING COSTS	73 226 €	OPERATING LOSS	59 350 €
TOTAL	896 488 €	TOTAL	896 488 €

VOLUNTARY CONTRIBUTIONS IN KIND 2023-2024

EXPENSES		RESOURCES	
SCIENTIFIC PROGRAMS & AWARENESS-RAISING	0 €	IN-KIND DONATIONS AND SKILLS SPONSORSHIP	303 265 €
COMMUNICATION & MOBILIZATION	23 774 €		
FUNDRAISING & PARTNER SEARCH	187 401 €		
OPERATING COSTS	92 090 €		
TOTAL	303 265 €	TOTAL	303 265 €

ABOUT PURE OCEAN

Pure Ocean is an endowment fund based in Marseille and Lorient. Its main mission is to support innovative research projects around the world, contributing to the protection of fragile marine ecosystems and biodiversity. Beyond the funding of scientific projects, Pure Ocean organizes conferences and promotes races and sporting challenges to raise public awareness of the critical situation of our ocean.



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www.pure-ocean.org

