

THE MONACO OCEAN PROTECTION CHALLENGE (MOPC) REWARDS FOUR INNOVATIVE BUSINESS IDEAS FOR OCEAN PRESERVATION! – 8th Edition –



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On Wednesday, May 14, the winners of the Monaco Ocean Protection Challenge (MOPC), co-organized by the International University of Monaco, the Oceanographic Institute – Fondation Albert Ier, Prince of Monaco, Monaco Impact, and the Prince Albert II of Monaco Foundation, were rewarded during the Grand Finale at the Oceanographic Museum of Monaco, in the presence of distinguished guests. Born in Monaco, an influential player in ocean protection, this prestigious international competition is designed for students and young entrepreneurs worldwide. Its mission is to actively support the creation and development of start-ups capable of demonstrating a positive impact on ocean protection in the short or medium term.

The 2025 edition saw a record number of applications, submitted by both students and start-ups, reflecting the competition's growing international reputation. This increasing recognition is due to the dedicated efforts of the organizers, effective word-of-mouth, and the key role of MOPC ambassadors, particularly through incubation networks spanning five continents.

A strategic context to mobilize the private sector

This edition took place in a particularly significant context, just few weeks ahead of major international events dedicated to the ocean: the 3rd United Nations Ocean Conference (UNOC 3), co-organized by France and Costa Rica, scheduled from June 9 to 13, 2025, in Nice, and the Blue Economy and Finance Forum (BEFF), officially recognized as a "Special Event of UNOC", co-organized by the Government of the Principality of Monaco, the Oceanographic Institute, and the Prince Albert II Foundation, in

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partnership with France and Costa Rica, set to take place at the Grimaldi Forum on June 7 and 8. Both UNOC and BEFF will highlight the urgent need to transition from an unsustainable maritime economy to a regenerative blue economy, emphasizing the central role of innovation, whether technological, financial, or governance-related.

Engaging the private sector is not just desirable, it is essential! The Monaco Ocean Protection Challenge addresses this urgency by supporting a new generation of ocean-focused entrepreneurs, fostering the emergence of high-impact, concrete solutions, and connecting these talents with institutional and economic ecosystems that enable projects to scale effectively.

Several finalists and winners from this 8th edition, as well as previous ones, will be invited to participate in BEFF, offering them an exceptional opportunity to expand their initiatives.

This year, 138 teams from 129 universities, representing 66 nationalities, worked from mid-January to the end of March 2025 to develop business ideas presenting innovative concepts for a more sustainable ocean. Out of the 138 initial submissions, following two selection rounds, six projects were chosen for the Grand Finale divided in two categories "Business Concepts" and "Startups" by a panel of 16 experts, including marine specialists, entrepreneurs, incubators, and investors. As the last round of this pitch competition, the finalists were invited to present and defend their projects live on the Oceanographic Museum's Conference Room stage, aiming to convince the jury members of their vision and impact.

A Grand Finale in the presence of distinguished guests

The event welcomed several prominent figures, including H.E. M. Jean d'Haussonville, Ambassador of France to Monaco, H.E. Ms Marie-Pascale Boisson, Ambassador of Monaco to China and Australia, H.E. M. Didier Garmerdinger, Ambassador of Monaco to India and Japan, Ms. Marie-Noëlle Gibelli, National Councilor and Vice President of the Culture & Heritage Commission (representing M. Thomas Brezzo, elected member of the National Council of Monaco), Ms. Caroline Pratte, Honorary Consul of Canada in Monaco, Ms. Sophie Krafft, Honorary Consul of Sweden in Monaco, Dr. Mathias Jonas, Secretary General of the International Hydrographic Organization, M. Georges Richards, Director of Community Jameel, M. Francesco Prazzo from SBM Offshore Monaco, M. Franck Chiniard, President of the Association des Directeurs Informatiques de Monaco, and many others.

A challenging task for the final jury!

The jury was composed of distinguished professionals from the fields of finance, entrepreneurship, incubation, and startup acceleration, including:

- **Mr. Vincent Thomas**, Deputy CEO, CFM Indosuez Wealth Management (MOPC Lead Sponsor)
- **Ms. Sandrine Sauval-Chanteloube**, Director, MonacoTech
- **Prof. Dr. Davide Staedler**, Founder & Administrator, Daxtachem SAM, Professor at the Department of Biomedical Sciences, University of Lausanne
- **Mr. Olivier Raybaud**, Managing Partner, SWEN Blue Ocean, SWEN Capital Partners
- **Mr. Alessandro Romano**, CEO, Ocean Twist Biotechnology (Winner of the MOPC 2021 "Audience Choice Award")

AND THE GRAND WINNERS ARE...

Winner in the "Business Concepts" category

COOL EQUITY - Project presented by Ms. Layasree Vemmata Gopi, Ashoka University, India

The mission of Cool Equity is to revolutionize the seafood supply chain through sustainable and decentralized cooling solutions based on the Phase Change Material (PCM) Passive Cooling process. These innovations help preserve marine ecosystems, reduce seafood waste, and empower coastal communities.

By providing affordable and reusable cooling systems to fishermen, Cool Equity actively reduces overfishing, minimizes resource waste, and protects marine biodiversity.

Prize Package: €2,000 cheque, sponsored by Inalve, Clear Reef, and Ecocéan, €2,000 cheque, sponsored by the Association des Directeurs Informatiques de Monaco (ADIM), Mentorship program valued at €3,000, offered by White Castle Partners, "Pass Explorations": Each member of the winning team will receive unlimited access to the Oceanographic Museum of Monaco, with a fast-track pass valid for the winner and one accompanying guest, courtesy of the Association des Amis du Musée océanographique de Monaco.

Winner in the "Startups" category

RONGBIENT BIOTECH - Company registered in Singapore – Project presented by Mr. Thibaut Marvin Monfort Micheo, France

Globally, feed additives for animal nutrition and farming account for over 50% of costs (more than 70% in shrimp farming) and contribute to over 50% of greenhouse gas emissions in the industry. Rongbient Biotech provides algae-based biological products that replace 5% of conventional feed, enhancing shrimp immunity against diseases and improving the animal gut microbiome. This innovation helps reduce the use of feed additives, while significantly lowering CO2 emissions.

Prize Package: €5,000 cheque, sponsored by Monaco Impact, €2,000 cheque, sponsored by the Association des Directeurs Informatiques de Monaco (ADIM), Acceleration program valued at €4,000, offered by White Castle Partners, invitation to participate in the Blue Economy and Finance Forum, courtesy of the competition organizers, Pass Explorations: Each member of the winning team will receive unlimited access to the Oceanographic Museum of Monaco, with a fast-track pass valid for the winner and one accompanying guest, courtesy of the Association des Amis du Musée océanographique de Monaco

Winner of the "CFM Indosuez Coup de Coeur Prize"

IZALGUE - Project presented by Ms. Andrea Tassard, Ms. Klervi Gautier, and Mr. Quentin Brissart from EIGSI (School of Engineering in Industrial Systems) France, and ESCOM (Higher School of Organic and Mineral Chemistry), France.

Every year, 50,000 m³ of green algae pollute the beaches of Brittany, creating environmental and health challenges. Most of this algae is currently collected and burned, a process that generates CO₂ emissions and wastes a potentially valuable natural resource. Izalgue provides sustainable algae-based insulation solutions for the construction industry, repurposing excess organic waste from our oceans, a direct consequence of human-induced pollution.

CFM INDOSUEZ WEALTH MANAGEMENT, Lead Sponsor of the Monaco Ocean Protection Challenge - A leading banking institution and a pioneer in responsible finance in Monaco, CFM Indosuez Wealth Management joined the circle of companies supporting the Monaco Ocean Protection Challenge in 2023, becoming its lead sponsor from that date.

CFM Indosuez awarded the "CFM Indosuez Coup de Coeur Prize" to IZALGUE, a startup personally selected by the bank. This highly practical award includes tailored business acceleration support, offered by CFM Indosuez and delivered by one of its partners, with a value of €3,000.

Winner of the "Spotlight on Africa" Prize

ACQUADEN - Company registered in Kenya. Project presented by Ms. Bridget Njenga

Acquaden is a women-led mariculture company based along Kenya's coastline, pioneering sustainable hatchery systems and environmentally friendly aquaculture practices. The company designs efficient

and scalable aquaculture hatcheries with innovative solutions that enhance productivity, reduce environmental impact, and support the sustainable production of seafood.

Acquaden focuses on crustacean farming, the integration of seaweed and seagrass, and the development of innovative aquaculture solutions to empower coastal communities and promote marine conservation.

Spotlight on Africa – an African start-up was awarded! A significant part of the Ocean's future lies in Africa, where the potential to develop a real, effective, and regenerative blue economy is immense. This year, an African start-up will receive a special award ("Spotlight on Africa" Prize) sending a strong message to inspire youth across the continent to engage in innovative projects that contribute to ocean conservation and the Sustainable Development Goals. The winning company and its founders will receive dedicated support from the organizers of the MOPC.

The prize was awarded in the presence of a prominent figure from the business world, **Mr. Mo Ibrahim, Founder of the Mo Ibrahim Foundation**, who was invited to share a few words of encouragement with the finalists and the audience.

Prize package: Inclusion in the 1000 Ocean Startups platform; privileged access to a local investment fund; a €1,000 grant from Dietsmann; and an invitation to participate in the Blue Economy and Finance Forum.

Each winner received a trophy in the form of a unique artistic piece specially created for the MOPC 2025 Grand Finale, crafted from recycled materials by jewelry designer Alberto Domenico Vitale, CEO of Vitale 1913 Monte-Carlo, who has been committed to ocean preservation and sustainable trade since 2014.

In addition to CFM INDOSUEZ WEALTH MANAGEMENT, the MOPC is supported by:

- **DIETSMANN**
- **WHITE CASTLE PARTNERS**
- **ASSOCIATION DES DIRECTEURS INFORMATIQUES DE MONACO**
- **CLEAR REEF**
- **VITALE MONTE CARLO**
- **INALVE**
- **ECOCEAN**
- **ASSOCIATION DES AMIS DU MUSÉE Océanographique DE MONACO**

About the Organisers:

- **INTERNATIONAL UNIVERSITY OF MONACO:** The International University of Monaco aims to prepare the next generation of managers and entrepreneurs to face today's and tomorrow's challenges. Key themes such as Entrepreneurship/Intrapreneurship, Innovation/Digital Transformation, and Social and Environmental Responsibility are integrated into all of its programs — from Bachelor's to Master's and MBA levels.
- **OCEANOGRAPHIC INSTITUTE, FOUNDATION ALBERT I, PRINCE OF MONACO:** The Oceanographic Institute works to raise awareness of the Ocean's beauty as well as its fragility, while promoting sustainable management and effective protection of marine ecosystems. To this end, the Institute acts as a bridge between the scientific, economic, political, and public spheres, leading a wide range of initiatives on both the national and international stage (conferences, exhibitions, educational programs, etc.). The Institute is rooted in the legacy of Prince Albert I and continues through the unwavering commitment of H.S.H. Prince Albert II of Monaco to explore, love, and protect the Ocean.
- **MONACO IMPACT:** Monaco Impact's mission is to promote Monaco as a global hub for philanthropy and social impact investment. As part of its agreement, Monaco Impact sponsors a competition involving IUM students, rewarding the best project aimed at developing social

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media tools to engage and raise awareness among Gen Z about the importance of protecting the Ocean.

- **PRINCE ALBERT II OF MONACO FOUNDATION:** Founded in 2006 by H.S.H. Prince Albert II of Monaco, the Prince Albert II of Monaco Foundation is a global non-profit organisation dedicated to promoting planetary health for current and future generations. The Foundation focuses its efforts on key geographical areas: the Mediterranean Basin, Polar Regions, and Least Developed Countries. It has already granted over €110 million to support more than 780 projects aimed at mitigating climate change, promoting renewable energy, protecting the Ocean, preserving biodiversity, managing water resources, and combating deforestation.

Partner Organizations:

The Monaco Ocean Protection Challenge relies on numerous partners to promote the competition on an international scale.

- **Ocean Hub Africa**
- **1000 Ocean Startups**
- **Index Blue Tech – Cluster Maritime Français**
- **Clear Reef Social Funds**
- **SWEN Capital Partners**
- **Ocean Innovator Platform**
- **Searious Business**

Before reaching the Grand Finale on May 14, 2025, candidates had to go through a selection round in mid-April, assessed by a first jury composed of the following members: Mr. Frédéric Durand, CFM Indosuez Wealth Management; Mr. Laurent Faure, Dietsmann; Dr. Céline Dubreuil-Degortes, Oceanographic Institute, Prince Albert I of Monaco Foundation; Mr. Magnus Frohmann, Prince Albert II of Monaco Foundation; Ms. Véronique Raoul, Inalve; Mr. Cyrille Poirier-Coutansais, Centre d'études stratégiques de la Marine, initiator of the Index Maritime des Start-ups du Cluster Maritime Français; Prof. Heather Koldewey, Zoological Society of London; Mr. Adrien Vincent, Albatros Advisory; Ms. Birgit Liodden, The Ocean Opportunity Lab & 1000 Ocean Startups; Dr. Samuel Dupont, BIOCEANOR; Ms. Adeline Abou-Ali, International University of Monaco; Mr. Thomas de Williencourt, Pure Ocean; Mr. Guirec Dewavrin, Aquabiotop; Mr. Gilles Lecaillon, Ecocean; Mr. François Simard, Marine Conservation Expert; Mr. Florian Stengele, Monaco Impact; Mr. Franck Guarnieri, Centre de recherches sur les risques et les crises, Mines ParisTech.

The other finalists competing in the Grand Finale of this 8th edition

« Business Concepts » category

- **INVENT.io** - Seoul National University Korea, nationalities of the project leaders: Korean, Colombian and Japanese, presented by Mr Heiner Camacho. INVENT.io' vision is to become a global pioneer in tidal-based hydrogen infrastructure, enabling a net-zero ocean economy. INVENT.io has designed the Tidal Gravity Battery (TGB), a coastal hydrogen energy system that converts the gravitational potential of ocean tides into green hydrogen, functioning as both an energy harvester and a hydrogen fueling station. Mr Heiner Camacho.

« Startups » category

- **ARUNA REVOLUTION HEALTH INC.** - Company registered in Canada, presented by Ms **Rashmi Prakash**. Aruna Revolution is a fibertech company developing compostable absorbent materials from agricultural waste to replace plastic and tree pulp in the \$211B disposable hygiene market. Their first product—a high-performance compostable menstrual pad—addresses both climate and health by offering a circular alternative to traditional single-use products. Aruna is scaling through B2B sales, D2C channels, and licensing its proprietary fibers globally.
- **MOLLUSCAN-EYE** - Company registered in France, presented by Mr Ludovic Quinault. MolluSCAN-eye offers an innovative biosurveillance solution that uses connected mollusks (oysters, mussels, and scallops) to continuously monitor water quality in real-time. Its patented

High Frequency Non-Invasive (HFNI) valvometry technology analyzes the physiological and behavioral parameters of these bivalves to detect water pollution 24/7, providing an early warning system that is 10 times more sensitive than traditional chemical analysis methods.

Success stories of the MOPC laureates from previous editions

Ocean Twist Biotechnology, a start-up laureate of the 2021 edition, winner of the “Audience Award” (under the name Ittinsect). The company’s founder, Alessandro Romano, participated as a judge in the 2025 final and also delivered an inspiring speech to share his journey since winning. He also contributed to a unique event at the Oceanographic Museum Aquarium, during which fish were fed with the innovative feeds developed by his company. Ocean Twist Biotechnology develops aquaculture feeds based on insects or raw materials from the circular economy. The company continues to expand its production of insect-based feeds for aquaculture to reduce reliance on fishmeal made from wild-caught fish.

In 2024, the company rebranded as Ocean Twist Biotechnology to highlight a technological breakthrough that now allows the use of a wide range of raw materials from the circular economy, in addition to insects.

An agreement with Eni, a global energy technology company, will enable the company to transform 700,000 tons of residues from biofuel extraction into highly nutritious ingredients.

CEO Alessandro Romano will deliver a keynote speech at the opening of the pitch session of the Grand Finale to share his successful experience in turning a business concept into a start-up and driving its growth.

Innov&Sea, laureate of the 2024 MOPC in the Start-up category. Innov&Sea develops innovative ecotoxicity tests serving industrial and public stakeholders. Winning the MOPC has significantly increased Innov&Sea’s visibility among potential clients. The company continues to grow in the cosmetics market, strengthening its presence in France and Europe by collaborating with prestigious brands in the sector, while beginning its export strategy outside the European Union. Its ambition is to promote internationally a marine ecotoxicity testing solution that offers an alternative to in vivo testing using live animals.

Innov&Sea also won the i-Lab innovation competition organized by Bpifrance, gaining national recognition that will fund an extensive R&D program aimed at developing new in vitro tests to evaluate the environmental impact of cosmetic products on marine ecosystems and create innovative tools for marine biosurveillance, particularly regarding industrial discharges and wastewater.

For Pauline Cotinat, President and co-founder, present at the Grand Finale, Innov&Sea’s goal is to support as many industrial and public stakeholders as possible, become the leading laboratory in marine ecotoxicology, and actively contribute to ocean preservation.

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