

EXECUTIVE SUMMARY

# Our Ocean Youth Leadership Summit

October 23rd-24th, 2019

*Oslo, Norway*



**OUR OCEAN**

YOUTH LEADERSHIP SUMMIT

OSLO, 23 - 24 OCTOBER 2019

Co-hosted by:



In collaboration with:



Norwegian Ministry  
of Foreign Affairs

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# About the Our Ocean Youth Leadership Summit



## Overall, this year's summit:



Shifted the focus of the conference from discussing the problems to **identifying actionable solutions**.



Demonstrated the **incredible potential of youth** to develop new solutions to difficult challenges when given the appropriate capacity-building and resources.



Highlighted the **importance of cross-sectoral and interdisciplinary approaches to problem solving**, both through the diverse participant backgrounds and the large number of collaborating partner organizations.



**Connected, inspired and empowered a group of 100 young ocean leaders** to further their commitment to protecting the health of our ocean.

## Inspiring Youth. Cultivating Ideas. Accelerating Solutions.

As an integral part of Our Ocean conference, Sustainable Ocean Alliance (SOA) co-hosted in cooperation with UiT - The Arctic University of Norway and the Norwegian Ministry of Foreign Affairs the fourth annual Our Ocean Youth Leadership Summit, which took place on October 23th-24th, 2019 in Oslo, Norway. The summit aligned with the main conference theme and featured ocean solutions designed by young leaders in the following areas: climate change, sustainable fisheries, marine pollution, sustainable blue economy, marine protected areas and maritime security.

Initiated by a partnership between U.S Secretary John Kerry and Sustainable Ocean Alliance (SOA), the summit provides an opportunity to showcase youth-led ocean solutions and entrepreneurial innovations, and to create a networking opportunity for youth to engage with leaders in policy, industry, research, government initiatives, ocean conservation, and NGOs.

This year we sourced the world's top 100 initiatives created by young leaders of ages 18-35 from 48 countries and designed a program that offered a high-level of interaction to foster collaboration, boost ocean youth leaders' professional development and inspire future generations to take action.



# About Sustainable Ocean Alliance

## WHO WE ARE

Sustainable Ocean Alliance (SOA) is a global organization that advances the impact of start-ups, social enterprises and youth-centered initiatives that are developing solutions to protect and sustain our ocean. SOA's pipeline of ocean leaders, ages 16-35, is cultivated through a hub-based model, led by students at the collegiate and young professional level.

## WHAT WE DO

We are focused on inspiring youth to develop new solutions for the oceans both to address the causes of ocean harm (e.g., marine pollution, unsustainable fishing, ocean acidification and habitat destruction), as well as developing innovative new solutions for the oceans (e.g., using autonomous vessels, new sensors, blockchain, Big Data and Machine Learning applications). SOA is a 501(3)c Non-Profit organization based in the heart of Silicon Valley in San Francisco and are the official youth partners to the Our Ocean conference.





# The Next Generation of Ocean Leaders



**During the Our Ocean Youth Leadership Summit, the next generation of entrepreneurs, political leaders, scientists and researchers gathered in Oslo to come up with visionary ideas on how to conserve and sustainably use our ocean, for the present and future generations.**

The young delegates met with high-level global leaders and participated in a design thinking bootcamp in order to build and develop new ideas for solutions to some of our greatest ocean challenges. They then pitched their solutions to a select panel of prestigious judges to receive actionable feedback and advice on how to best move forward with their projects. They also learned about ocean solutions that their co-participants are working on in their respective countries.

Speakers in attendance included HRH the Crown Prince of Norway, the Prime Minister of Norway Erna Solberg, former Secretary of State John Kerry, Norway's Minister of international development Dag-Inge Ulstein, UNEP Champion of the Earth Afroz Shah, Under Secretary for Economic Growth, Energy, and the Environment (U.S. Department of State) Keith Krach, CEO of the Ocean Conservancy Janis Searles, Commissioner for Maritime Affairs and Fisheries for the European Commission Karmenu Vella, Ambassador and Special Envoy for the Oceans at the UN Peter Thomson, and the First Lady of the Republic of Palau Debbie Remengesau.

Overall, summit speakers and programming empowered all participants in the room to boldly act in the face of great adversity and provided the tools necessary to affect systemic change.

# Areas of Action

Our **Ocean Youth Leadership Summit** focused on advancing youth-led commitments and ocean action. We believe that it will take an integrated and concerted effort across all these action areas to meet objectives set forth by SDG 14 and to sustain the ocean at large.



## Marine Pollution

38% of the youth delegates are engaged in projects to tackle marine pollution, with a strong emphasis on ocean literacy, technology for stopping plastic pollution from rivers and streams, and circular economy.



## Sustainable Blue Economy

26% of young delegates are developing solutions centered around the sustainable blue economy, projects include helping large companies transition to zero emissions and exploring Ocean Thermal Energy Conversion as a clean energy source.



## Climate Change

14% ocean young leaders are tackling climate change related issues. Youth commitments around climate change included using media, journalism and storytelling to elevate awareness and dispel doubt about climate change, accelerating our transition to renewable energy, and working with global youth



## Sustainable Fisheries

9% of young delegates are working on solutions related to sustainable fisheries, including working to support artisanal fishing communities, combating IUU fishing, improving fish health in aquaculture facilities, and developing plant and cell-based alternatives to fish protein.



## Marine Protected Areas

9% of young delegates are working on Marine Protected Areas, including creating and monitoring new MPA's in Haiti, making existing MPA's more resilient by re-planting and 3D printing coral reef, and promoting the idea of designating the world's largest MPA in the Arctic.



## Maritime Security

2% of young delegates are looking are working on projects around maritime security related issues, including writing legislation to enforce NIS and target shipping and oil and gas companies.





**Our Ocean Conference theme this year is: [Learning, Sharing, Acting](#) and the event highlighted the importance of knowledge as the basis of our actions and policies to ensure the protection of our oceans, responsible management of marine resources and sustainable future economic growth.**

Our Ocean Youth Leadership Summit program is concurrent to the main Our Ocean conference. This year the theme was “Co-creating the Sustainable Blue Economy”. Following Norway’s global leadership in integrated ocean management, the summit programming was designed to inspire, inform, and empower young participants to build holistic solutions that better balance the needs of society, industry and the ocean environment. In preparation for the one and a half day bootcamp, Sustainable Ocean Alliance (SOA) and UIT - the Arctic University of Norway coordinated an online webinar to frame the discussion and build foundational competency in the topics at hand.

Through a design thinking bootcamp and informative lightning talks, participants learned in real-time how they can build systemic solutions that bridge the needs of multiple stakeholders across government, the private sector and academia. Overall, participants left the summit ready to spur ocean action in their local community and be global agents of positive change.





# Setting The Scene

Daniela Fernandez, CEO of the Sustainable Ocean Alliance (SOA) welcomed ocean leaders to the summit by sharing the story of the Sustainable Ocean Alliance – which was born from the idea that youth deserve a seat at the table when major decisions are being made about our futures. This idea inspired Fernandez to encourage former Secretary of State John Kerry to add a youth component to this conference. And four years later, we are celebrating the fourth Our Ocean Youth Leadership Summit, empowering youth and giving them a seat at the table.

Anne Husebekk, Director at The Arctic University of Norway also welcomed the ocean young leaders to the summit and shared research being done on marine algae in the Arctic, and how algae can play a key role in everything from fish feeds to climate change mitigation. Then finally, there were opening remarks from **Dag-Inge Ulstein, Minister of International Development of Norway**.

The Minister encouraged participants to use their time at the conference wisely and tap into the skills of the youth around them. “You as youth are not yet locked into old structures, you are free to explore and reinvent the wheel,” he said. The Minister reminded participants that even though we are bombarded by disconcerting environmental news daily, such as facts put forward in the IPCC Special Report on Oceans and the Cryosphere, we should be called into action instead of falling into despair. The Minister also announced that Norway has established a program worth USD 200 million to help developing countries improve their waste management systems and keep plastics in the value chain, to help the world transition from a “throw-away culture” to a circular economy.



**Dag-Inge Ulstein, Minister of International Development of Norway**

The opening session was wrapped up with an opening keynote from **UNEP Champion of the Earth, Afroz Shah**. Participants watched a video showing Shah's work cleaning Mumbai's beach by mobilizing millions of volunteers. Shah called on the young leaders to reject an attitude of complaining and waiting for governments to act, and said “focus every day on what you can do to make a difference”, stressing that individuals are equally capable of building a better future as the high-level leaders people often wait for and complain about. Shah started as one person interested in cleaning up his city's beach. Now Mumbai's beach has been transformed from one of the most polluted in the world to actually having turtles nesting there for the first time in decades. The program then transitioned to the Ideas Marketplace portion of the agenda, giving youth the opportunity to take the stage.



**UNEP Champion of the Earth, Afroz Shah**



A group of five young adults, three women and two men, are posing together for a photo. They are all smiling and looking towards the camera. The woman on the far left has long blonde hair and is wearing a light-colored top. The man next to her has short brown hair and is wearing a dark suit jacket over a light shirt. The woman in the center has long dark hair and glasses, wearing a white top. The woman next to her has brown hair and is wearing an orange top. The man on the far right has short brown hair and glasses, wearing a dark suit jacket over a light shirt and a patterned tie. They are all wearing lanyards with badges. The background is a white banner with the 'OUR OCEAN YOUTH LEADERSHIP SUMMIT' logo repeated. The text 'Young Ocean Leaders Commitments' is overlaid in large white letters on the left side of the image.

# Young Ocean Leaders Commitments

**Ocean young leaders from around the world gathered to present their commitments for solving some of the most pressing ocean challenges.**

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Ocean young leaders from around the world gathered to present their commitments for solving some of the most pressing ocean challenges. Each leader was tasked with bringing an action-oriented ocean “pledge” to the summit, which included an achievable plan to advance our ocean in some capacity and convey a commitment to acting upon this plan far beyond the two-day event.

In the Ideas Marketplace portion of the summit, participants who submitted their projects for the challenge had 60 seconds to share their ocean commitment, idea, or vision in front of an audience of over 100 attendees based on one of the 6 areas of action (climate change, marine pollution, MPAs, maritime security, sustainable blue economy, sustainable fisheries).



**Patrick Cage, United States:** I commit to building a team and designing the solutions that will scale ocean farming to reduce global greenhouse gas emissions, ocean acidification, and polluting nutrient loads by 10% in 10 years with my team at Fathom sustainability.



**Pia ve Dahlen, Norway:** I commit to increase Norwegian's knowledge about the ocean and their connection to it with my team at Passion for Ocean. Action creates attitude and knowledge breeds initiative, motivation and understanding.



**Justin Geldard, Australia:** I commit to enhancing the success of coral restoration and management using 3D-printed coral structures and placing them within existing coral canopies to help rebuild the foundation of coral reef ecosystems.



**Diwigdi Valiente, Panama:** I commit to creating artistic and scientific laboratories in which we will build solar powered biorock reefs sculpted by artists to grow back the eroding islands of the Indigenous Guna community in Panama.



**Berend Jan Kleute, The Netherlands:** I commit to working with my team to harness the ocean's vast potential for renewable energy, enabling a more reliable power supply, which is complementary to fluctuating wind and solar energy.



**Bret Hart Gutierrez, Philippines:** I commit to imparting knowledge on climate change and increasing understanding on marine conservation with Project Paraiso, the project instills environmental behavior in households and communities



**Caroline Emilie Nielssen, United Kingdom/Norway:** I commit to increasing engagement of environmental, social and economic sustainability and exploring green new solutions with the Oxford Brookes Sustainability Society.



**Jamille Chin, Jamaica:** I commit to teaching youth about climate change with Blue Green Youthopia. My organization is helping students to set up active environmental groups in schools that can contribute to protecting our watersheds and beaches.

**Krittanon Thotsagool, Thailand:** I commit to working toward mandatory ocean literacy curriculum in elementary to high schools across Thailand so that youth are aware of the problems facing our environment.



**Oliver James Beardon, United Kingdom:** I commit to promoting ocean literacy using hands-on experience at sea through my program, Sail Britain.



**Bryan Madera, Philippines:** I commit to Plastic Battle, an initiative to prevent single use plastic water bottles at source by partnering with businesses to encourage refilling water in reusable containers and at the same time reduce sales of bottled water.



**Betty Jahateh, The Gambia:** I commit to educating the younger generation about the effects of plastic pollution, so that they will become a part of the solution and not the pollution.



**Jeremy Raguan, Seychelles:** I commit to enhancing the success of coral restoration and management using 3D-printed coral structures and placing them within existing coral canopies to help rebuild the foundation of coral reef ecosystems.



**Francesca Alberti, The Netherlands/Italy:** I commit to building a floating ecosystem and new traps entirely made of recycled plastic because we believe in placing the plastics back into the water in a way that is positive for the environment at recycled island foundation.



**Camille Cabujat, Philippines:** I commit Green Barangay to achieve a community waste collection system that transforms recyclable wastes from households into fund sources for environmental initiatives or community projects.



**Peter Chauvel, The Netherlands / Canada:** I commit to understanding and developing a value chain that encourages the necessary actors to turn the tide on ocean plastics and ghost fishing gear, to move toward a circular economy where actors profit and benefit.





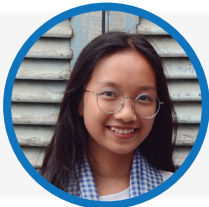
**Aushim Merchant, Thailand:** I commit to working with my company Florence energy to provide an end to life solution by converting all non-recyclable waste plastics with no sorting, washing or drying to quality petroleum.



**Faiza Fauziah, Indonesia:** I commit to improving recycling in Indonesia using Dropbox. Dropbox is a recycling point where consumers can drop their recyclable waste in the nearest Dropbox locations. The aim is to help the community get easy access to waste recycling.



**Mohamed Aziz Tousli, Tunisia:** I commit to creating artistic and scientific laboratories in which we will build solar powered biorock reefs sculpted by artists to grow back the eroding islands of the Indigenous Guna community in Panama.



**Chit Taw Win Min Thu, Myanmar:** I commit to creating biodegradable straws made out of the scales of crabs, shrimp, and fish to reduce waste in landfill.



**Philip Ehrhorn, The Netherlands:** I commit to promoting The Great Bubble Barrier, a smart system that intercepts plastic pollution in rivers and canals, enabling municipalities, cities, and other governmental organizations to take responsibility for plastic pollution in their waterways.



**Alexa Goodman, Canada:** I commit to shifting awareness into action by empowering people to eliminating single use items, giving them proper waste management techniques and fostering a community that works together to make sustainable lifestyle choices.



**Gilang Ramadhan, Indonesia:** I commit to installing and promoting a "No Plastic Corner" at my local museum that combines history, culture and activism to promote a healthier environment and a healthier ocean.



**Nadine Mellem, Norway:** I commit to keeping Norway beautiful through my project "The Ocean Starts Here," which is an umbrella project aiming to be both educational and a driver for action. While raising awareness to the extensive impact of our personal littering patterns, we can seek to find effective campaigns that generate changes in behavioral patterns at the individual and societal level.



**Nathan Apiri, Romania/Nigeria:** I commit to working on the maritime cyber security space cyberspace and learning about good cyber hygiene to ensure the sustainability of the blue economy.



**Jennifer Lamy, United States:** I commit to developing cell-based and plant-based alternatives for seafood to help reduce pressure on wild-caught fisheries within the sustainable seafood initiative at the good food institute.



**Ifeoluwa Omoyeni and Oluwaseyi Oduwale, Nigeria:** We commit to working with small scale fishermen to help them make their fisheries management systems more efficient, and to training women in financing their small-scale fisheries operations. We will work to implement government reform that monitors and enforces regulations on industrial fishing and supports these small-scale fishers.



**Muhammad Wawan Adisaputra, Malaysia:** I commit to providing community empowerment for Hawksbill turtle conservation management, and to cleaning garbage on land to prevent it from reaching the ocean.



**Katie St. John Glew, United Kingdom:** I commit to developing fisheries traceability tools using stable isotopes so that all products can be labeled with catch location and species information.



**Narges Karimi, Romania/Nigeria:** I commit to solving the problem of Sea Lice, one of the most important challenges in the aquaculture industry. I am developing a sustainable solution to treat them, which will help reduce mortality rates in fish farms.



**Stephanie Foucault, United States:** I commit to promoting the shutting down of the high seas to fishing, allowing stocks to regrow and getting rid of harmful fishing subsidies.



**Anton Puhovkin, Nigeria:** I commit to using cryopreservation with the aim of creating and contributing to an international cryobank of genetic resources for marine species.





**Jacopo Scafura, Italy/Spain:** I commit to understanding and connecting with indigenous people and using their knowledge to help us form ecosystem-based adaptation and mitigation measures.



**Naghmana Zafar, United Kingdom:** I commit to the promotion of maritime tourism as a part of the sustainable blue economy. We believe this will provide an opportunity for the development of coastal communities, small and medium businesses and overall sustainable maritime growth in our country.



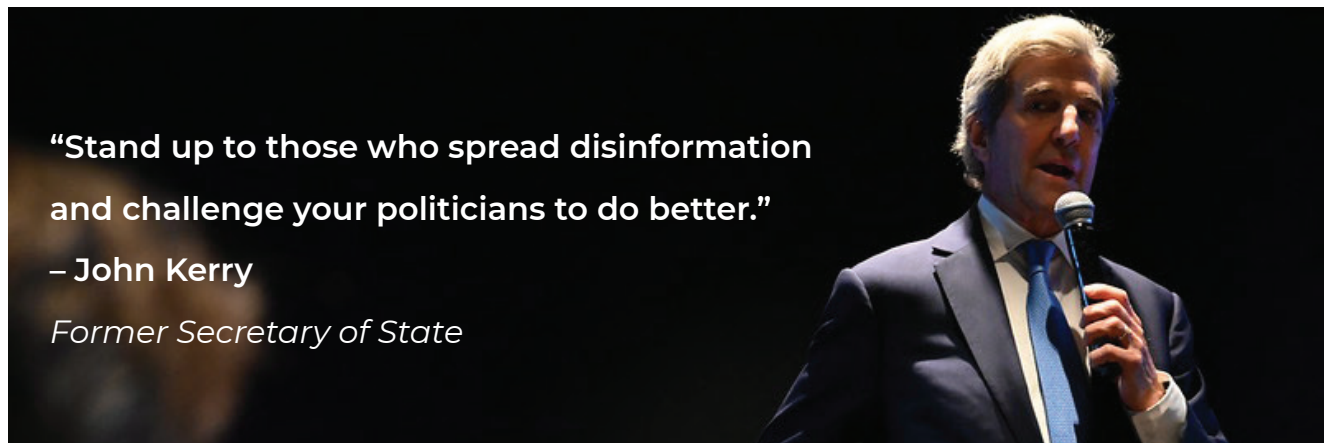
**Chanintorn Pensute, Romania/Nigeria:** I commit to educating people about the benefits of buying less – both to their mental health and for the environment, through my podcast “Minimalists Diary.” I promote being able to count the items you own, and if you have less than 300, you are doing well.



**Olga Mironenko, The Russian Federation:** I commit to working with big businesses in order to find alternatives that fight against pollution, helping them transition to a zero waste and zero emissions retail supply chain in terms of packaging, logistics, and warehousing operations.

# High-Level Speakers Inspiring Actions

Throughout the summit, young leaders had a chance to hear from and interact with illustrious individuals across the public and private sector. Former Secretary of State John Kerry took the stage and discussed the importance of fighting for science in today's political landscape, challenging participants to “stand up to those who spread disinformation and challenge your politicians to do better.” Recognizing we have entered a critical time for the planet, he challenged all of the youth leaders to do everything in their power to transform politics and society in order to tackle carbon emissions.



**“Stand up to those who spread disinformation  
and challenge your politicians to do better.”**

**– John Kerry**

*Former Secretary of State*

Then young leaders heard from another special guest, **Keith Krach, Under Secretary for economic growth, energy, and the environment at the U.S State Department**. Under Secretary Krach had a fireside chat with Sustainable Ocean Alliance's founder and CEO Daniela Fernandez on transformative leadership. The two talked about the importance of mentors, and the role mentors have played in their lives.

Finally, through the end of the day, young leaders heard a series of lightning talks about “Scaling Ocean Solutions”.

They first heard from **Bjørn Tore Markussen, CEO of REV Ocean's Ocean Data Platform** who discussed The Ocean Data Foundation & Ocean Data Platform. Markussen stressed how the biggest challenge currently facing global marine research is lack of knowledge. Moreover, compared to the innovation and research done on land, data-driven marine research is far behind. Although there are a number of smaller data initiatives and platforms in the world today, there is no all-encompassing platform combining it all. Markussen introduced the recently launched Ocean Data Platform, an initiative which gives users access to data to use in creating visualizations. Markussen and his team are driven by the desire to unlock ocean data and make it available and searchable for everyone, especially scientists and policy makers, to unlock the next frontier of ocean innovation.



**Keith Krach, Secretary for Economic Growth, Energy,  
and the Environment at the U.S State Department**



**Bjørn Tore Markussen, CEO of  
REV Ocean's Ocean Data Platform**



**Ellie Mackay, CEO of Ellipsis Environmental**

Next, young leaders heard from **CEO of Ellipsis Environmental, Ellie Mackay**. She discussed her start-up, Ellipsis Environmental, which is a software that uses AI and machine learning in order to detect and map all the world's missing plastic from the skies. Mackay was motivated when she learned that of all of the Plastics that has ever entered the ocean, only 1% is visible and traceable on the ocean's surface, which means 99% of it is missing. Ellipsis' software detects small pieces of plastics, using machine learning algorithms. They predict that there will be an economic tipping point when the price of creating virgin plastic becomes higher than the price of recycling post-consumer plastic, and after that tipping point, there will be a new "gold-rush" to find the missing plastic. Their data will serve as a source to inform that rush. Their software takes advantage of citizen science, seafloor mapping surveys and exploration surveys, and many other sources to trace the missing plastic.

Next, they heard from the **CEO of the Ocean Conservancy, Janis Searles Jones**. Janis talked about the importance of scaling up ocean solutions in order to make marine ecosystems more resilient. As an example of a successful program that has been scaled-up, she highlighted the Ocean Conservancy's Global Ghost Gear Initiative. She also announced a new internship opportunity for young women interested in working with the Global Ghost Gear Initiative, called the Joanna Toole Internship.



**Karmenu Vella, Commissioner for Maritime Affairs and Fisheries of the European Commission Environmental**

Finally, the Youth Leaders heard from **Commissioner for Maritime Affairs and Fisheries of the European Commission, Karmenu Vella**. His message in a nutshell was to "choose to act rather than protest," As an example of acting, he highlighted SOA's founder and CEO, Daniela Fernandez, who saw a lack of youth voices in global decision making, chose to create an organization focused on bringing those youth voices to the table. He also reminded youth leaders that our problems are increasing, and we need more global commitments and deliveries on those commitments in order to drive action and turn the tide on climate change.





**During the Our Ocean Film Night, young leaders reconvened in the evening to eat pizza, watch some amazing new underwater footage by OceanX, learn about OceanX's work, and ask questions to Vincent Pieribone and Emily Colvin.**

Through four short immersive documentaries, participants co-discovered the wonders of the ocean, through witnessing the majestic underwater creatures of the Antarctic, deep sea coral in the Atlantic, and hearing the stories of scientists, filmmakers, and communities bravely protecting these precious natural habitats. Participants left the theatre inspired by the rare ocean footage borne from fearless OceanX-led expeditions in the deep sea and with an enriched understanding of how film/digital media can be a critical leverage point to scale ocean awareness to the masses.

The second day of Our Ocean Youth Leadership Summit was kicked off with two Keynote Speeches, the first from **Ambassador Peter Thomson, Special Envoy for the Oceans at the United Nations**. Thomson discussed his role in defining the Sustainable Development Goals at the UN, reminding youth that the conversations that we are discussing today have been going on for a long time, and that concrete actions have been proposed but have been egregiously insufficient. He discussed the current conversation at the WTO about removing harmful fisheries subsidies, as well as noting that plastic corporations are beginning to wake up to the backlash of their products in part thanks to the work that youth have done to push back.



The second keynote was given by **First Lady of the Republic of Palau, Debbie Remengesau**. The First Lady reminded young ocean leaders that “we have not inherited this earth from our ancestors, we are borrowing it from our grandchildren.” She shared with the group a short video about the “Palau Pledge,” and effort by the Government of Palau to promote environmentally conscious tourism in their country. Over 2 million tourists visit the small nation of Palau every year, and this effort has raised global awareness through the reach of the countries tourists. In 2020, when Our Ocean Conference is held in Palau, every participant will need to take the “Palau Pledge” which will be visible as a stamp in their passport. In addition to the Palau pledge, the First Lady discussed how her country has written into its constitution to become completely nuclear free, has banned trawling and declared their entire EEZ a Marine Sanctuary, making it a fully protected maritime territory. Palau has also banned toxic sunscreens and banning single use plastics. She closed her speech by challenging the youth in the room to change the world as future leaders, and declaring that “Palau stands with you and for a healthy planet for this generation.”



# The Bootcamp

**Juli Sikorsk and Valeria Ossio of Mandalah – a globally conscious innovation consultancy, served as the lead facilitators for the Design Thinking Challenge.**

They began by providing an overview of the design thinking methodology and how teams would work together to build prototypes for their respective bootcamp challenges. Overall, the 20 Teams of 5 worked together to break down their problems, and come up with specific, actionable ocean solutions. The 20 teams were divided by the following challenge areas and guiding prompts:

## **Challenge Theme: Ethical Seafood**

There are numerous challenges facing the seafood industry. Whether it's aboard a distant water fishing vessel or at a shrimp processing facility, the global seafood industry continues to grapple with the issue of modern day slavery. Through debt bonding, coercion and manipulation, and straight-forward human trafficking, millions have been subjected to forced labor. Mislabeling seafood, known as "seafood fraud", is another global issue. In the US, for example, several studies in recent years have shown rates of mislabeling ranging from 20-46%. On the other hand, the European Union has used transnational legislation and genetic testing tools to dramatically drop their rates of seafood fraud.

**Guiding prompt:** *How might we better track where our seafood comes from, who fished/raised*

## **Challenge Theme: Taking Marine Parks from Paper to Practice**

Marine Protected Areas (MPAs) are a hot topic these days and activists and governments alike are pushing to protect ever greater swaths of the ocean. Nevertheless, some of these parks are created merely for political points, without community buy-in, or simply without enough long-term resources to manage them.

**Guiding prompt:** *How might we use novel technology to design and manage MPAs for long-term success?*

## **Incentivizing Sustainability Beyond the Global Supply Chain**

Third-Party Certification (think Marine Stewardship Council, Aquaculture Stewardship Council, Friends of the Earth) have proven remarkably effective at aligning market incentives to drive sustainability improvements in fisheries and aquaculture. However, small, domestically-oriented farmers and fishers are generally not involved in these schemes as they do not have the same local sustainability demand and/or the resources to achieve certification.

**Guiding prompt:** *How might we make sustainable practices more practical and beneficial for small-scale fishermen and aquaculturists?*

## Reducing Plastic Pollution at the Source

The plastic industry has been trying to shift the focus of the global plastic problem from a production problem to an end of life-cycle/recycling/consumer choice problem. They are pumping money into campaigns and messaging for this idea in order to continue or increase production of their product instead of working toward more sustainable alternatives.

**Guiding prompt:** *How might we limit plastic production at the source?*

## Diverting waste streams from actual streams

The scourge of plastic waste now affects every part of the world from the Himalayan air to the Mariana Trench. Many communities, in particular islands and developing states are struggling to collect, sort, and recycle or dispose of plastic waste.

**Guiding prompt:** *How might we divert plastic waste from entering global waterways?*

## Rebuilding and buying time for our Coral Reefs

Coral Reefs are a source of livelihood and a protector against severe storm damage for many coastal communities. They are also our most biodiverse ocean habitat. Corals are facing many threats, from climate change/ocean acidification, to overfishing and tourism. Studies have shown that microfragmenting of corals and focusing on rebuilding coral reefs in areas where there are known “cold pools” or cooler currents may be key to keeping reefs alive through bleaching events.

**Guiding prompt:** *How might we help Coral Reefs to survive, recover, and thrive in the face of a myriad of challenges?*

## Partnering with the Climate Youth Movement to Highlight the Oceans

Youth Climate Movements, including Friday’s for Futures, the Sunrise Movement, and Extinction Rebellion have garnered attention around the globe and have helped to push a more climate-focused political agenda, including the Green New Deal in the United States and similar efforts are underway in Europe. These movements are intimately connected with the Ocean.

**Guiding prompt:** *How might we (the ocean community) raise the ocean’s profile with and among these various climate movements?*

## Building Urban Resilience

Youth Climate Movements, including Friday’s for Futures, the Sunrise Movement, and Extinction Rebellion have garnered attention around the globe and have helped to push a more climate-focused political agenda, including the Green New Deal in the United States and similar efforts are underway in Europe. These movements are intimately connected with the Ocean.

**Guiding prompt:** *What challenges will your city / country / region be facing in our new climate reality? How might we engineer more climate resilient cities?*

## Suffocating Seas

A growing area of the world’s coastal seas are characterized by chronic dead zones. These dead zones are mostly the direct result of eutrophication caused by nutrient pollution stemming particularly from agriculture and wastewater.

**Guiding prompt:** *How might we prevent the creation and expansion of coastal dead zones?*



## Ocean Friendly Tourism

Some parts of the world are struggling with overtourism, while others are trying to develop tourism as an alternative source of income for communities affected by depleted marine resources. With an ever-growing travelling public and “ecotourism” gaining increased attention in blue economic development, it is critical that we develop more sustainable forms of coastal tourism.

**Guiding prompt:** *How might we balance a community's need for economic development with the need to sustainably manage tourism to protect unique and often sensitive ecosystems?*

## Stopping the Race to the Bottom

There is an ongoing, quiet race to the bottom of the seafloor. This race seeks to secure the first commercial permits and patent key technologies that will allow the extraction of valuable rare earth metals from the deep seabed. There are great concerns regarding this literal “race to the bottom” as adequate investigation of environmental impacts has not been carried out. The International Seabed Authority, charged with stewarding use of the seabed, is considering giving commercial licenses in June 2018, before major international treaties that might add additional considerations have been finalized.

**Guiding prompt:** *How might we ensure that the international community prioritizes sound, rigorous science and the precautionary principle when deciding whether or not to allow commercial seabed mining in national and international waters?*

## Renewable Energy from the Ocean

The ocean provides a vast source of potential energy resources, in the forms of wave energy, tidal energy, offshore wind energy, and ocean thermal energy conversion. These sources have the potential to help alleviate the global climate change threat, but the ocean environment should be protected while these technologies are developed.

**Guiding prompt:** *How might we create, develop, and deploy technologies that can harness energy from the ocean while minimizing negative potential impacts to the marine environment?*

## Banking on Blue Carbon

As atmospheric carbon concentrations have far exceeded the 350ppm limit of “climate safety” (now reaching 410ppm), ever greater attention is being paid to protecting and enhancing ecosystems that sequester carbon (blue carbon) and to human activities that remove carbon from the ocean and atmosphere (ocean carbon mitigation).

**Guiding prompt:** *What challenges will your city / country / region be facing in our new climate reality? How might we engineer more climate resilient cities?*

## Cleaner, Greener Maritime Transport

Nearly 90% of humanity's goods move across the ocean. Maritime transport serves quite literally as the arteries of the global economy. That important economic role, however, accounts for approx. 2.5% of total global greenhouse gas emissions. Recognizing the importance of reducing maritime transport's carbon footprint to achieving targets laid out in the Paris Agreement, the Getting to Zero Coalition has declared a moonshot goal of 50% of 2008 emissions by 2050.

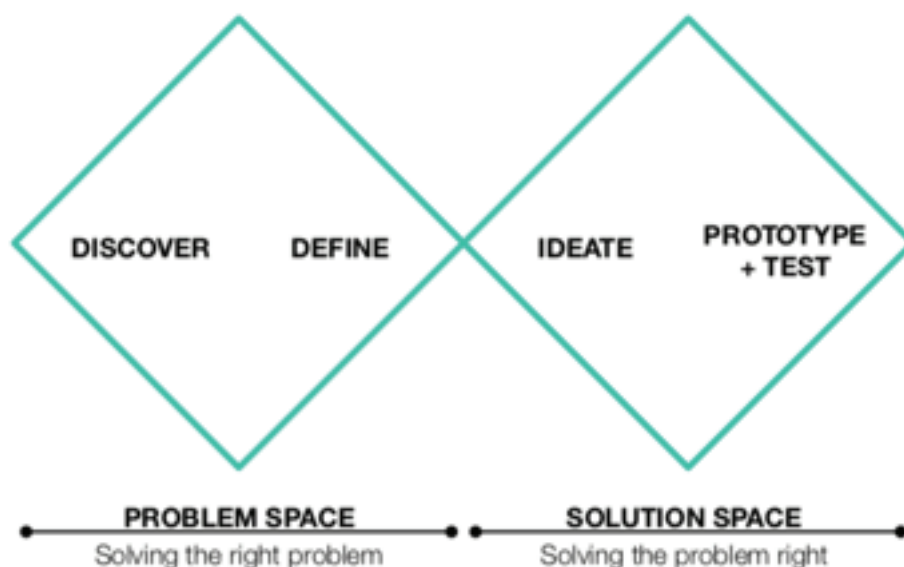
**Guiding prompt:** *How might we aid the transition to greener shipping?*





**The Prime Minister of Norway Erna Solberg** officially kicked off the bootcamp and provided opening remarks that stressed how “youth are the future, and leaders are listening.” The Prime Minister proceeded to work directly with several teams throughout the bootcamp and helped them ideate around solutions to challenges such as overfishing, marine pollution, blue carbon, coral reefs, and ecotourism.

**The Bootcamp was divided into 3 Phases:**



**Defining the Problem** — Teams learned about the audience for whom they are designing through problem trees, affinity mapping, and abstraction laddering. They then redefined and focused questions based on insights borne from these exercises.

**Ideation**—Teams brainstormed creative solutions through guided divergent thinking exercises and solution sketches. Teams then reached consensus through dot voting and decision matrices.

**Prototyping**—Teams worked together to develop a prototype of the chosen solution. Prototypes served as realistic facades for solutions and took many forms, including business model canvases, policy frameworks, software UI sketches, and physical objects.

At the completion of Phase 3 of the bootcamp, **Dr. Bård Borch Michalsen, a Professor from UiT - The Arctic University of Norway** provided advice to the teams for how to best pitch their ideas and convince their audience of the feasibility and potential impact of their solutions.



# Shark Tank: Pitching the Solution



Teams had their chance to pitch their solutions to a panel of distinguished judges, Vincent Pieribone of OceanX, Elizabeth Kim of U.S. State Department, Tom Grasso of the Walton Family Foundation, Katrina Tveiteras of UiT - The Arctic University of Norway, and Gry Ulverud from RevOcean. Each team had exactly one minute to pitch their solution, followed by 3-minutes of Questions and Answers from the jury.



# The Pitches

## Team 1: Ethical Seafood

Proposed a new mobile application named “Labely,” which understands ecolabels so you don’t have to. This smartphone app helps you make sense of environmental labels and tracks label compliance so that consumers can choose the products that are right for them. They will work through corporate partnerships with global retailers to ensure label compliance. Tagline: Buy sustainably, with “Labely.”

## Team 2: Ethical Seafood

Our company will use DNA authentication to track the sources of our seafood. By scanning a unique barcode tag on any fish you buy, users will be able to identify the species and see the location in which the fish was caught.

## Team 3: Tracking Marine Parks from Paper to Practice

The Marine Park Rangers will train citizens and promote citizen science and enforcement to help enforce no take zones and other rules within Marine Protected Areas.

## Team 4: Incentivizing Sustainability Beyond the Global Supply Chain

Our group will host workshops, build toolkits, and provide data using technology such as internet of things to make fishing more sustainable. We will provide advice to countries that need help with fisheries regulations.

## Team 5: Reducing Plastic Pollution at the Source

Proposed a barcode system that tracks plastic from producer, through the consumers, to the recycling process using blockchain technology. The plastic will be taxed, and the consumer gets their money back when they take it back to identified recycling centers/boxes.

## Team 6: Reducing Plastic Pollution at the Source

Plastimpics aims to increase transparency of the Industries and Companies that produce the most plastic. They will do this by creating a website that scores each major company based on their total plastic usage, sources of plastic, amount of post-consumer plastic reused, and innovativeness with using new alternative materials. The website puts major companies in competition while allowing users to easily compare how different companies stack up so they can make informed choices. The website will kick off before the 2020 Tokyo Olympics.

## Team 7: Diverting Waste Streams from Actual Streams

Proposed an application that will show shoppers the overall plastic index of a store before entering. This index will include the total amount of plastic packaging entering that store from the shipping to the shopping. Zero waste shops will score the best with this system, and shops with a low waste index will get tax benefits and subsidies to help them sell their products at a lower price, and grow their customer base.

## Team 8: Rebuilding and Buying Time for our Coral Reefs

Proposed a scientific and online support to restore reefs. Coral Shepherd will connect hotels with local coral reef institutes, as well as provide data and services. Hotels that work with Coral Shepard and their local institutes will earn an eco-branding for having done their part to help restore their local reef. Eco-conscious travelers can look for hotels online with this label and choose to stay somewhere that is doing their part to help their local environment. In addition, tourists staying at these “Reef Friendly” hotels can take part in coral plantings.

## Team 9: Rebuilding and Buying Time for our Coral Reefs

Proposed an “Air-Conditioning” system for coral reefs. Using NOAA’s Coral Reef Watch to identify regions likely to get hit by coral bleaching, they will identify and deploy the air conditioning technology before bleaching occurs, “let’s make coral cool again.”



### **Team 10: Partnering with the Climate Youth Movement to Highlight the Oceans**

Proposed a global U.N. inspired group of young leaders to help write general legislation for a “Blue New Deal.” The specifics of the legislation will vary by country, and youth leaders in every country will be in charge of advocating for these changes to their governments.

### **Team 11: Building Urban Resilience**

Proposed building a platform of crowd-sourced data from cities around the world to help decision makers and community planners make proactive instead of retroactive decisions about the futures of their cities in a changing climate. Toolkits will help walk community planners through proactive steps that they can take for their cities and politicians can then be held responsible if they continue to prolong action.



### **Team 12: Ocean Friendly Tourism**

Proposed to create a mobile application that will let tourists search by destination, and will provide them with insight about that destination’s culture and flora and fauna.

### **Team 13: Stopping the Race to the Bottom**

Proposed to create a mobile application called Mindfootprint – which promotes consumer responsibility by teaching consumers about the origins of all of the components of the products that they buy. This is achieved by tracking the supply chains of major companies. The App will promote responsible consumption and suggest alternatives for products that have a lighter environmental impact and promote a circular economy instead of reaching for deep sea. It also gives customers an option to offset their carbon footprint of the products they buy.

### **Team 14: Renewable Energy from the Ocean**

Proposed an app that will track electricity usage in individuals households, and put neighbors in competition with one another in reducing their energy usage. The app will also provide the users with tips for how to get their energy consumption down and change daily habits.

### **Team 15: Banking on Blue Carbon**

“Deep Blue Sea” will work with the IMO to help them bring transition the world’s shipping to being completely Carbon neutral using onboard algae bioreactors on ships.

### **Team 16: Banking on Blue Carbon**

“The Guna Carbon Bank” will work toward restoration of mangroves and seagrasses in Guna nation, Panama. They will also create sculptures underwater that function as coral nurseries, then conduct and education campaign teaching locals about the importance of corals. They will also work toward community development and financing for indigenous communities.

### **Team 17: Diverting Waste Streams from Actual Streams**

Proposed to create and operate a global ocean learning center in pursuit for plastic free oceans, Ocean Literacy is the best low-tech solution we have for helping our ocean.

### **Team 18: Incentivizing Sustainability Beyond the Global Supply Chain**

Proposed running workshops and trainings for fisherman to train them on using the optimal gear types and technology for the type of fish they are targeting, and how to avoid bycatch. They will also provide incentives for ships arriving in port to offset their carbon footprint at sea.

### **Team 19: Cleaner, Greener, Maritime Transport**

Proposed a new mobile and laptop app for tracking greenhouse gas emissions from ships. This App will be easily accessible so everyone can see the carbon footprint of the goods and services that purchase from overseas.

### **Team 20: Building Urban Resilience**

Proposed a wave energy generator for coastal cities that generates tidal movement and acts as a wave breaker to create energy and avoid flooding and erosion by breaking waves before they make it to the coastline.



## Announcing the Winning Project

His Royal Highness the Crown Prince of Norway thanked youth leaders for being here and for being a part of the solution, he was impressed by all of the teams that he saw and was happy to see groups working across disciplines. After careful consideration from the judges on the criteria of impact, feasibility, and wow factor, the winner was Team 14. Team 14, comprised of four young people from Pakistan, Thailand, Ireland, and Ghana, presented their solution on the main stage alongside SOA's founder and CEO, Daniela Fernandez, at the conclusion of Our Ocean conference.

## Closing the Day

Brandon Levy, Program Director at SOA, closed the day by thanking everyone for their passionate engagement throughout the bootcamp and provided an overview of opportunities for continued involvement beyond the summit. To this end, he announced the launching of a youth-led, crowdsourced ocean policy framework as well as project funding opportunities for young ocean leaders in Indonesia, Japan, and the United States. Overall, Levy left the audience with the message that inner transformation and personal development is primary to shifting societal values and affecting systems-level change. Going forward, SOA will continue to host global convenings and provide online programming aimed at increasing the leadership skills of the next generation and elevating their solutions on the world stage.

# Reflections from Participants

“It is impossible not to **get inspired by the whole atmosphere, young strong passionate people working together towards the same goal...**” —Francesca Alberti, Italy

“The ocean unites us all and it is a great encouragement to know there are other young people all over the world with the same passion as me, and bringing us all together is **a powerful catalyst for inspiring positive change.**” —Oliver Beardon, United Kingdom

“The bootcamp was remarkable! I had the opportunity to **present my project in front of an audience** and my contribution was heard.” —Gilang Ramadhan, Indonesia

“Our Ocean conference is **a “bluetopia”** - paradise for ocean problem-solvers. I feel completely transformed and renewed by the bootcamp. The young ocean leaders from around the world are some of the most enthusiastic, creative, and brilliant people I have met.” —Patrick Cage, USA

“What I enjoyed the most is **the perfect balance between talking and taking action**; and the fact that the youth was placed within the decision-making process and our voices were heard. In that way, I think Our Ocean Youth Leadership Summit was really **a perfect embodiment of the priorities in the race to save our ocean.**” —Anne-Sophie Roux, France

“For the first time ever I feel like I am part of **a family, a supportive, international community of like minded people** who I can go to with struggles or ideas. I love the fact that there is the potential for ocean leaders to attend more than one summit to build upon skills and relationships from the previous year. This really pushes me to do even more to help our oceans.” —Aimee Clark, New Zealand

“Spending time together with so many doers and dreamers from different backgrounds, truly gave me hope! The ocean is connecting us, and now **we will connect the dots between knowledge, will-power and creativity for a healthy ocean.**” —Marte Klemetsdal, Norway

“Our Ocean Youth Leadership Summit is a conference every committed young ocean leader should endeavour to attend because it represents the **new global movement** where committed and deliberate actions to save our oceans are receiving global attention and support. It is where words are put into action to save our oceans.” —Oluwaseyi Oduwole, Nigeria

“Our Ocean Youth Leadership Summit is a **huge family of extremely professional, qualified and progressive people**, trying to “make oceans great again” through science and technologies. I am very proud that I am a part of this family...” —Tamar Kerdikoshvili, Georgia

“Our Ocean Youth Leadership Summit did not feel like a youth summit, rather, it gave me **the opportunity to speak to and impart my feelings on the challenges faced by myself and others**, to the people who have the power and influence to undertake these changes needed” —Peter Chauvel, Netherlands

“Our Ocean Youth Leadership Summit in Oslo brought together an extremely **dedicated and powerful group of young ocean leaders** whose infectious energy reassured that this planet is in good hands. By connecting this community, important partnerships have been developed that will translate into meaningful ocean action.” —Mark Haver, United States

“Sharing ideas and collaborating with amazing young from 45 different countries was **extremely inspiring**, and moments like this give me hope that there are great young people relentlessly working for health oceans and a better world for all. We can make this, together!.” —Marina Porto, Brazil



"To attend the Our Ocean Youth Leadership Summit was the **best experience of my life**. That was my first time outside my country and I never thought, even studying oceanography, I would meet other young people from around the world who, like me, dream of a healthy and sustainable ocean". —Lisandra Matos, Brazil

"The Our Ocean Youth Leadership Summit was **inspiring, bolstering, and encouraging**. It is a **powerhouse of changemakers**. This experience has provided me with new hope for how we can improve our relationship with the ocean." —Mary Paquet, Canada

"The event was **an incubation of innovation** and promotes youth to initiate and take action towards the sustainability of the ocean." —Tuan-Anh Bui, Vietnam

"Our Ocean Youth Leadership Summit is a **platform of inspiration** when you needed it the most. The youth leaders' energy and action are contagious". —Bryan Madera, Lead Campaigner, Plastic Battle

"Our Ocean Youth Leadership Summit summed up in one word was **empowering**. Society needs to work together to protect our planet and natural resources, and I think empowering youth to be apart of this movement is the most critical component for achieving success" —Carly Portch, Australia

"Ocean Youth Summit was the best platform to learn and exchange ideas with people from various backgrounds to **solve maritime and fisheries issues**, and design **how to improve policies** going forward." —Maria Anindita Nareswari, MMAF Indonesia

## Looking Forward

In her closing remarks delivered to Our Ocean conference participants, Daniela Fernandez made three requests of the world leaders in the room to:

- ▶ Accelerate the timeline of their targets to within the next five years,
- ▶ Reject proposals to advance seabed mining, and
- ▶ Increase efforts to empower the next generation of ocean stewards.



To capitalize on the energy and ideas that resulted from the conference, Sustainable Ocean Alliance (SOA) has made microgrants available to all 20 teams who participated in the bootcamp, and will continue to support all the attendees through the Sustainable Ocean Alliance's Ocean Leadership and Ocean Solutions Accelerator programs.

Sustainable Ocean Alliance (SOA) will be co-hosting the Our Ocean Youth Leadership Summit in Palau in August 2020.

See you in August 2020 in Palau!

To support our community, contact us at [ouroceanyouthsummit@soalliance.org](mailto:ouroceanyouthsummit@soalliance.org)

**#OurOceanYLS**

