

REV OCEAN  
STRATEGY 2.0

## 1. Why REV Ocean: The state of the ocean

Life on Earth originates from and depends on the ocean. The ocean is a vital source of life, inspiration, livelihood, nourishment and biodiversity. It produces half of the oxygen we breathe, provides essential food for more than 3 billion people, employs about 200 million people in fisheries alone, and adds \$3 trillion USD a year to the global economy. The ocean is the Earth's largest ecosystem, hosting a rich array of life spanning from microscopic organisms, up to the iconic blue whale, the largest animal that has ever lived on Earth. It is estimated that the ocean is home to over two million different species with over 90 percent yet to be discovered. Despite representing 99 percent of the living space on Earth, large areas of the ocean remain a mystery.

However, we do know that the ocean is in crisis. Populations of fish, sea birds, whales and other marine species have been reduced by as much as 50 percent in the past 40 years, according to the WWF [Living Blue Planet Report](#). This is a much more acute situation than previously anticipated, calling for a global rescue operation with immediate action at local, national and international levels.

Marine life is threatened by a range of human-initiated factors, notably overfishing, climate change, habitat destruction, aquaculture, tourism, invasive species, plastic pollution and other sources of land-based pollution. What we are seeing is humanity collectively mismanaging the ocean to the brink of collapse. We are posing a serious existential threat to intrinsically valuable and irreplaceable marine species and ecosystems and to human civilization as we know it. This is because the ocean and the life it nurtures contain critical elements of the Earth system and the ecosystem services human existence relies on.

Fortunately, solutions do exist. With the right science, innovation, communication and regulation, we can turn the tide on this degradation.

The ocean is a dynamic, interconnected global ecosystem that can recover if the negative pressures are dealt with effectively. To do that, we need to improve our understanding of the ocean, get key stakeholders aligned with that understanding - decision-makers, researchers, business and civil society - and turn that knowledge into concrete solutions.

REV Ocean shall contribute to exactly that.

## 2. What is REV Ocean?

REV Ocean is a game-changing initiative that has an ambitious yet simple goal - to ensure 'One Healthy Ocean'. Working together with an extensive network of strategic partners we will champion a new generation of ocean solutions and inspire humanity to take action to combat harmful global impacts on the marine environment.

Taking on the role as ocean trailblazers, we intend to create positive, measurable impact and provide a pathway for others to follow and motivate the next generation of ocean leaders. REV Ocean will strive to fill critical knowledge gaps, develop innovative solutions, and bridge science, business and policy sectors to achieve positive change. Our programs will be developed to support the UN Ocean agenda, the UN Decade of Ocean Science (2021-2030) and help achieve the UN Sustainable Development Goals (2015-2030).

REV Ocean is a not-for-profit company established and funded by Norwegian businessman Kjell Inge Røkke. The foundation was established as a result of Mr. Røkke signing the Giving Pledge in 2017 vowing to give away more than 50% of his fortune to philanthropic causes. Any profit generated from our activities will be reinvested into our work programme for a healthier ocean.

**Our vision:** One Healthy Ocean

**Our mission:** From curiosity to understanding to solutions

### The Research Expedition Vessel

The REV Ocean Research and Expedition Vessel "REV" will be made available to researchers, decision-makers, artists, campaigners, businesspeople and philanthropists that share our goal of improving the health of the ocean.

The science and solutions projects will be selected through a transparent, peer-reviewed process following open targeted and blue-skies calls for proposals. These projects, rooted in REV Ocean's science and solutions programme, will set the course for the vessel's cruise plan. As a requirement, we expect research teams to make their data and findings from REV Ocean cruises findable, accessible, interoperable and reusable (FAIR principles) through open access through internationally recognised data portals.

The REV Ocean vessel will also be available for commercial hire. REV Ocean charters will offer unique opportunities for guests to get involved in science and solutions-related activities tailored to their interests. Revenue from charter hire will be used to finance future science and solutions cruises.

Whenever possible, research and awareness-raising activities will be incorporated into the vessel's expeditions or private trips.

### 3. Our focal areas

There are many issues facing the ocean today, and REV Ocean considers climate change, plastic pollution and overfishing to be the most critical. We have chosen these overarching priorities for our work:

#### Reduce the impact of climate change and ocean acidification

Nothing is more important to humans than the ocean. If it was not for the ocean, climate change would have already made our planet uninhabitable. So far the ocean has absorbed more than 90 % of the warming created by humans since the 1970s, with warming now being observed at depths of as much as 1,000 m. But as vast as the ocean is, there is a limit to how much it can absorb, and the devastating effects are already showing through melting sea ice, dying coral reefs, loss of oxygen and impacts on species. The choices we make NOW are critical not only for the future of our ocean but for OUR FUTURE.

This is why REV Ocean has chosen climate change as one of our three top priorities. We will be supporting ocean climate science, the development of concrete solutions and mitigation and adaptation measures.

#### Reduce plastic pollution

Plastic pollution is ubiquitous in the marine environment and there is growing evidence of its impact on marine species. The impacts of plastic debris and microplastics in the marine environment has erupted into the public consciousness. This is not surprising given the recent estimated 4.8 – 12.7 million tonnes of plastic entering the ocean per year as a result of the generation of 275 million tonnes of plastic waste globally (2010 figures). Less than 5% of this plastic is recovered globally and so it is accumulating in the environment, including the ocean. Most debris in the marine environment is composed of plastic which can form up to 99.9% of the litter in some areas. Plastic enters the ocean via rivers, from storm water runoff, wastewater discharges and through the atmosphere, from other land sources (e.g. from beach littering or natural disasters), and directly at sea from shipping, aquaculture and fishing activities. The effects of plastics on wildlife include ingestion and entanglement, with nearly 700 species of marine animals reported to be affected by entanglement and ingestion of marine plastics, mostly for sea turtles, marine mammals and seabirds. Macro-plastics into micro- and nano-plastics, affecting also smaller animals such as micronekton and plankton, and adhering to marine snow which accelerates its transportation and accumulation on the seabed. Another issue of ocean plastics is the leaching of chemicals from degrading plastics, with toxic effects on fauna. Plastic use comes with severe environmental, social, economic and health consequences. However, many aspects of the distribution and impacts of plastic debris in the marine ecosystems remain unclear.

REV Ocean will reduce the negative impacts of plastic pollution by providing novel data on the distribution and accumulation of plastics (from macro- to micro- and nano-plastics) and the impact of plastic in marine fauna across the trophic web in order to provide scientific-based knowledge from which to develop policy for the reduction of plastic use and plastic waste. REV

Ocean will work with a multitude of ocean innovators and solution-providers to reduce the flow of plastics into the ocean and contribute to the removal of plastics that have already entered the ocean.

#### Stop unsustainable fishing

Marine fisheries are an essential element of human nutrition and contribute to global food security. With a growing human population, demand for fish is set to rise by at least 30 % by 2050. However, up to two-thirds of the world's fish stocks are overfished and over 20 % of global fisheries are not subject to any form of scientific assessment. In addition, illegal fishing is still responsible for about a fifth of the world's fish catches. Certain fisheries are associated with significant damage to marine ecosystems (e.g. bottom trawling) as well as bycatch of non-target species. REV Ocean will contribute to research and developing solutions to increase the sustainability of fishing both in terms of catches of fish and environmental impacts of fishing, including for new fisheries resources. The aim is to secure sustainable supplies of fish, whilst ensuring the ocean is healthy and able to support all the ecosystem services on which we rely.

#### 4. From knowledge to solutions

REV Ocean is unique in its focus on ocean solutions. REV Ocean will contribute to improving the ocean's health by collecting new data and making knowledge available with the goal to transform that knowledge into concrete solutions.

Ocean solutions can come in many forms including technology and novel methods that address practically specific ocean issues; governance that will develop and enforce rules and regulations for ocean management and conservation; capacity development that will contribute to expanding regional expertise to support the development of regional ocean solutions; education activities that will form the next generation of ocean experts; and awareness raising that will ensure society is well informed about the importance of the ocean.

REV Ocean will link scientific projects with solutions projects, creating synergies and added value to accelerate knowledge exchange and the implementation of solutions for a healthy ocean.

#### 5. Our values and approach

We will work in a fast and flexible manner while relentlessly focusing on results rather than processes.

We expect to break new ground, champion pioneering innovation, and make bold decisions to save our ocean. By acting as a beacon of hope we expect to attract the best and brightest talent worldwide to make this happen.

We will openly and freely share scientific results and ideas for solutions with a strong emphasis on transparency throughout. REV Ocean's actions will be guided by the best available science and technology in order to bridge gaps in knowledge, solutions, capacity and policy. We will strive not only to reduce our own environmental impact but focus on leaving a positive footprint through our activities and inspire others to do the same.

We will work with young and unestablished scientists and innovators and provide the next generation of ocean saviours with opportunities they may not otherwise get.

We will not do what others can do better. Therefore, we will partner and collaborate with the most influential actors across science, business, policy, and civil society, and facilitate cooperation beyond our own organization. We will work with the best ocean scientists, experts, innovators, entrepreneurs, communicators, educators and politicians worldwide to make the ocean healthy again.

We believe that raising public awareness is important to achieving the necessary political will and market changes that will enable ocean sustainability. We will therefore strive to produce excellent and innovative communications material related to our mission.

REV Ocean will focus on solutions, not problems; and on actions that do good, not only feel good.

Our core values are:

- **Catalytic**
- **Credible**
- **Creative**

## 6. Our goals

The REV Ocean goals are:

- a. Improve the understanding of our ocean and increase ocean awareness among decision-makers worldwide.
- b. Enable ocean action by bringing the right people together.
- c. Develop solutions to reverse the negative environmental situation in the ocean.