



“Let’s be Nice to the Ocean”

Proposal

Background: The [Global Seaweed Coalition](#) is a global partnership hosted by the UN Global Compact (UNGC) with the help of strategic and funding partner Lloyd’s Register Foundation and the scientific support of the French National Centre for Scientific Research (CNRS) established to oversee the safety and sustainability of the seaweed sector as it scales up. Through a holistic and multistakeholder approach, the Coalition aims to organize the whole seaweed value chain, from smallholder farmers to multinational businesses, specialized research institutes to intergovernmental organisations – working together to realize the full potential of the seaweed industry and to ensure its safety for consumers, for workers and for the environment. Environmental safety and Ocean health are at the core of the GSC’s approach to ensure the sector does not reproduce errors made on land, such as monoculture, abusive use of pesticides & destruction of genetic diversity.

Seaweed : a key component of marine ecosystems

Seaweeds forests and seaweed farming enhance ocean biodiversity by providing essential habitats and breeding grounds for numerous marine species, including endangered ones. Seaweeds are a primary food source for a variety of marine organisms, including fish, crustaceans, and mollusks, and support the whole food chain, making them a crucial component of marine ecosystems and a valuable asset for environmental conservation strategies.

Seaweed also has bioremediation qualities, absorbing nitrogen, phosphorous, and heavy metals from coastal waters, preventing harmful algae blooms and improving water quality. Additionally, seaweed absorbs carbon dioxide, reducing its concentration in the ocean and mitigating the effects of climate change



Natural seaweed forests are under threat and are declining in many parts of the world, from tropical to temperate waters. This is primarily because of stress from ecosystem disruption, which includes the loss of purple urchin predators, pollution & warming water temperatures, brought on by climate change. Furthermore, a large number of seaweed forests are losing some of their genetic diversity when migrating to cooler waters. Seaweed forests that have been lost are unlikely to reappear without **proactive measures**.

The United Nations Environment Programme (UNEP) recognizes the growing global interest in seaweed farming as a potentially scalable ocean-based climate change solution that may provide environmental and social co benefits as part of the advancement of resilient and climate smart aquaculture. Seaweed farms produce oxygen and remove dissolved carbon dioxide, potentially locally mitigating ocean deoxygenation and acidification. In tropical areas, seaweed farming has been and continues to be a viable means of promoting both environmental preservation and economic growth. But lack of genetic diversity and climate change pose challenges to primary production, leaving it vulnerable to illnesses and, consequently, crop failure, endangering the livelihood of hundreds of thousands of farmers. In consequence, the global seaweed community is calling for an **international initiative to increase the resilience of tropical seaweeds**, acknowledging the urgency of the situation.

Mining firms are not the only companies looking down into the deep sea with great interest: many "Ocean" solutions are being discussed in global conversations, including using seaweed for deep sea sinking for carbon sequestration purposes. But financial and regulatory tools being proposed as incentives to sink seaweeds are poorly designed, not competitive and inadequate for meaningful climate impacts. In addition, many scientists, including members of the Global Seaweed Coalition Scientific Council, are pointing the lack of sufficient knowledge on the functionality of deep-ocean ecosystems, their biodiversity, the ecosystem services they provide, and on the impacts on these fragile ecosystems. In consequence, they call for a **moratorium** on sinking seaweeds until its efficacy is established, and there are robust,



evidence-based assessments of its environmental, economic and societal sustainability, and appropriate regulations and legal frameworks are developed.

Recommendations

In consideration of the above, the Global Seaweed Coalition recommends to:

- Implement better protection and restoration of existing seaweed forests through Marine Protected Areas. Having countries including seaweeds in their conservation structures and frameworks, like coral reefs and mangroves will help protect seaweed stocks from being over harvested
- Build an international initiative to increase the resilience seaweeds strains through genetic biobanking
- Include the restoration of degraded kelp forests, establishment of new kelp forests and the expansion of seaweed cultivation in NDCs under the Paris Agreement.
- Include seaweed cultivation in island and coastal states' NAPs under the Paris Agreement to contribute towards natural disaster resilience
- Fund public and private actors to conduct accelerated research on the effects of sinking seaweed into the deep ocean, including monitoring and quantification of potential environmental impact