



United Nations
Global Compact



Lloyd's Register
Foundation

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Statement of Support to the Declaration of Shanghai

12000 Years ago or so, human beings moved from prehistory to modern history when we stopped being hunters & gatherers to develop agriculture and livestock. Today we are still in the stone age when it comes to the ocean. Ocean covers 70% the planet but still contributes to less than 3% of our food. Seaweed notably accounts for 51.3% of global aquaculture production with a production of 35M t per year. Still seaweed cultivation is only in Asia. Being the lowest tropic level in the ocean, seaweed should be an essential part of an integrated aquaculture.

Therefore we fully support the declaration of Shanghai and we call everyone in this industry and beyond to develop a regenerative and potentially restorative aquaculture including seaweed cultivation.

Seaweed is a high-quality food for human and feed for livestock, and fish with a potential to boost immune system and provide a lot of proteins. Seaweed cultivation supports fish and shellfish through a new ocean permaculture model that will be revolutionary for the seafood industry. Seaweed is a game changer and a nature-based solution for a sustainable aquaculture.

Seaweed polymers can also provide interesting solution to replace plastics.

Worth to mention that wild seaweed is increasingly vulnerable to disruption of the ocean ecosystem caused by human activity. Already lost 80% of seaweed forests in California are lost.

We now need to protect, replant and regenerate these ecosystems otherwise, they will disappear, and we will as well.

As for climate change, Seaweed is one of the most promising, scalable nature-based solutions for both decarbonizing the economy and sequestering carbon

It is the only food that reverse climate change.

Seaweeds fixes carbon through algal photosynthetic primary production and sink part of it almost forever in abyssal sediments.

Some seaweed grow up to 30cm a day and can grow up to 60m high !

This rapid biomass production and carbon fixation rate can be harnessed to create food or valuable inputs that displace emissions from plastics or pesticides production but it also sequesters carbon long-term in ocean sediments and abyssal waters.

As such seaweed is more than Net Zero, it is the only food that reverse climate change, act a as a carbon sink and could restore marine biodiversity as it will be presented at COP26 !

With recent rapid growth in SEA & Africa, seaweed represent a potential for additional revenues to coastal communities in emerging countries. Seaweed cultivation requires very little investment as all you need is to seed a few lines, put them in the water and let it grow...

Another interesting social aspect of the seaweed industry is the high level of inclusivity for women. Up to 80% of workers involved in seaweed are women in Tanzania and 60% Indonesia. Even in US and Europe, we see a large part of women at managing positions, way more than in any other aquaculture sector. As such seaweed may hold a promise to support women empowerment and gender parity.

We should map all possible cultivation areas and get together to train several 1 000's farmer in local communities all around to seaweed farming by 2030 to create an industry that has potential to provide revenues for several 100 000's people including mostly women

We should valorize these ecosystem services and create an offsetting program using seaweed and microalgae at UNFCCC by 2023. These programs should provide huge investment by 2030 to support research in order to scale the seaweed industry as well as to reduce up to 10 Gt CO2 equivalent by 2050

We should implement 1000's farm outside of Asia to feed the world of tomorrow with a very nutritional and sustainable food (full of proteins, iron, zinc, iodine, omega 3 LC, vitamins B2, C, D, etc...).

We need to develop 100 s of ocean permaculture pilots and train farmers. Seaweed could clean the ocean from agricultural run offs. Through bioremediation, seaweed has the potential to preserve, feed and restore biodiversity in the ocean.

Our objective is to gather in our newly established Safe Seaweed Coalition 1 000's of seaweed stakeholders from small holders to large food companies and establish solid regulations and standards to support scaling up the business to reach 25 Bn € by 2030 in order to feed millions of people and actively support other type of aquacultures

We need to educate people and governments about the multiple benefits of seaweeds so they can vote in their daily life for a product that is good for health and good for the planet. Seaweed could represent 2% of food intake by 2030 (already 10% in Japan today...)

If we get altogether, ocean farming has the potential to support addressing some of the most important challenges of our generation and provide new products for food, medicines, animal feed. Packaging, etc... It can make our aquaculture more reliable and sustainable, We could be remembered as the first generation of this planet to feed the entire world population with safe and sustainable food while cleaning ocean, mitigating climate change and alleviating poverty across the globe.

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