



The Climate Foundation
Wins Million-Dollar
XPRIZE Carbon Removal Milestone
funded by Elon Musk and
the Musk Foundation

And yes, we are thrilled! We want to thank all contributors for helping us achieve this milestone,
and we appreciate your ongoing support.

With your help, we hope to be a change that the planet needs in the next 10 years.

According to XPRIZE,

“The XPRIZE Carbon Removal is aimed at tackling the biggest threat facing humanity - fighting climate change and rebalancing Earth’s carbon cycle. Funded by Elon Musk and the Musk



Foundation, this \$100M competition is the largest incentive prize in history.”

While rapid and comprehensive decarbonization of the global economy remains the top priority, to meet the goals of the Paris Agreement and avoid the worst impacts of climate change, the

IPCC recognizes that carbon removal will need to emerge at scale this century. However, finding ways to restore carbon balance is far from the only challenge humanity is facing. Food security, saving biodiversity and finding ways for vulnerable communities to adapt to a warming world will be crucial in the difficult decades to come.

Marine Permaculture® SeaForestation



serves as a regenerative intervention providing deepwater-irrigated, open-ocean seaweed mariculture as a strategy for food security, regeneration of ecosystem services and carbon sequestration. At scale, deepwater irrigation can regenerate seaweed forests offshore, from tropical to seasonally temperate waters, as demonstrated by the Climate Foundation’s Philippines site deployed since 2019.

The foundational principles underpinning the development of Marine Permaculture

are comprised of:

- **Food Security**



Seaweed grown on our platforms is harvested to create biostimulants that confer drought and heat resilience to crops, cutting fertilizer

requirements by 20% while preserving yields. Seaweed is also a nutritious and scalable food source, helping to diversify food systems and reducing pressure on land-based agriculture. Offshore seaweed platforms will relieve precious land and coastal ecosystems. They will shift food production to the vast, naturally low-productivity, tropical and subtropical open ocean, with its immense deepwater nutrient supply.

• Ocean Ecosystem Regeneration



Marine Permaculture platforms will have a significant impact on marine life by regenerating many of the ecosystem services provided by offshore seaweed forests, including the provision of fish habitat.

• Carbon Balance



Every square kilometer of Marine Permaculture could potentially fix thousands of tons of carbon dioxide per year. Much of the seaweed falls from the seaweed platform during growth and sinks to the deep seafloor, where it is sequestered from the atmosphere for centuries in the abyssal ocean.

Having won this milestone award for the XPRIZE for Carbon Removal, the Climate Foundation and the other winners will scale their projects.

Additional grand prizes are to be awarded in 2025, with \$50 million paid to a single Grand Prize Winner and \$30 million to be distributed among 2-3 additional winners.



Dr Brian von Herzen, a Hertz Fellow, Co-Founder and Executive Director of the Climate Foundation, remarked “We are so proud that Marine Permaculture SeaForestation has won a Milestone XPRIZE for Carbon Removal from a field of 1,100 registrants. We wish to thank the judges for validating the potential of Marine Permaculture to help provide food security for billions, regenerate marine ecosystems, and draw down gigatons of carbon from the atmosphere and into the deep sea, consistent with Earth’s natural mechanisms for removing carbon from the atmosphere.”

The Climate Foundation acknowledges and thanks its many volunteers who have contributed their time, skills and expertise as well as major partners

including the Woka Foundation; MinterEllison; consulting engineering services firm Hatch; WSP; JS Bower Foundation; Dr. Bronners; Healthy Climate Initiative; Tetiaroa Society; Blue Symbiosis; Blue Economy CRC; Marine Bioproducts CRC; Just One Tree; the 2040 film; 180DC consultants; Edmund Hillary Fellowship (EHF); Paul Hawken & Regeneration.org; Dr. Krzysztof Dembek, Center for Social Impact; Prof CM Wang, University of Queensland; Prof. Craig Johnson, University of Tasmania; Climate Cleanup; Agrifutures; Sustainable Ocean Alliance; Third Derivative; Hatch.Blue; Kumano Shindo GIA; Sabble Investment; the Center for Cellular Construction at UCSF; the Center for Climate Repair at Cambridge and Woodfordia Inc. Many thanks to Dr. Carmen Blackwood at NASA’s Jet Propulsion Laboratory for their insightful conversations and to our independent reviewers including Professor Daniel Sigman, Princeton University and Dr. Nicholas Hill, Coast 4C.

About the Climate Foundation



The Climate Foundation is a US-registered nonprofit with operations around the world dedicated to researching,

developing and commercializing nature based solutions in line with our three core missions of global food security, ecosystem regeneration and carbon balance. Over the past few years, we have been focusing our scaling efforts on Marine Permaculture Seaforestation. This prize will enable us to begin scaling Marine Permaculture.

About XPRIZE



XPRIZE
CARBON
REMOVAL

ELON MUSK

XPRIZE is a global future-positive movement, delivering truly radical breakthroughs for the benefit of humanity. XPRIZE inspires and empowers a global community of problem-solvers to positively impact our world by

crowdsourcing solutions through large-scale competitions, tackling the world's grandest challenges in exploration, environment and human equity.

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