

## *Greetings from the Climate Foundation!*



Thanks to you, we were able to launch the first  $\frac{1}{4}$  acre. Next - a full hectare!

Dear concerned partners in change for good,

We really appreciate your support, your volunteering and your generous donations. It's great to know that we are not alone in our quest to keep the planet habitable. Because of your help, we have been able to achieve so very much! We've won awards, partnered with NASA and Universities around the world, given tons of talks, made forays into seaweed biostimulant and have been invited by the European Commission to share our message with the 30 EU member countries. But what we are doing has not been enough to prevent the world from hitting 1.5 C temperature rise. In fact, the start of June, 2023, saw global surface air temperatures rise 1.5 degrees Celsius (2.7 Fahrenheit) above pre-industrial levels for the first time. In the meantime, we all have to make substantial behavior changes if there is going to be any change at all - because our very future is at stake.

To a better future - *The Climate Foundation Team*

### GOOD NEWS



The annual Singapore Livability Challenge held a five-month global search for ground breaking solutions in the two categories of Climate Change and Food and Nutrition, which resulted in 600 submissions from more than 80 countries. Climate Foundation made the first cut of the top 40, then the top 15. And, we are proud to say that our Marine Permaculture won the popular vote and four out of six awards. It is wonderful to have others see the merit in what we are trying to do.

(It was an Oscar sweep!! To the right is Dr Chris Dembeck, our Chief Impact Officer, who accepted four of the six available awards on behalf of the Climate Foundation)



## DOUBLE YOUR

**DONATION** - Again! Private family foundations have agreed to *match everyone's donations* until we reach \$1,000,000!!! And ALL donations that have been received since May 2022 have been doubled. [Check out our webpage HERE with the goal-o-meter.](#)

## PHILIPPINES



Our Philippine worksite has had some exciting developments lately. We were blessed with the birth of some adorable puppies that brought joy to the whole team. We also hosted a group of volunteers from Santa Clara University who are collaborating with us on an important project.



Additionally, a big ocean series is being produced for a German outlet, and the crew just finished documenting our Marine Permaculture at the Philippines worksite. Next Channel News Asia will be doing a segment on us. It's been a busy time at our Philippine site, we're grateful for all the new connections and opportunities.

In addition, our **seaweed biostimulant, BIGgrow, has entered the final stages of the approval process with the Philippine FPA Authority.** This authority is responsible for permitting biostimulants, and we're hopeful that our official sales of BIGgrow will commence soon. The results from initial users have been overwhelmingly positive, with reports of accelerated growth in rice crops.

We even have farmers getting online (see photo at left) and letting other farmers know about what amazing things BIGgrow is doing for their crops!

Even more remarkable is that our **offshore surface platform is currently undergoing sea trials** to test its ability to deep cycle the 100m<sup>2</sup> and 1,000m<sup>2</sup> submersible seaweed platforms and conduct initial growth trials. Seaweed is successfully growing at a far more rapid rate on the platform. And in the coming months we will be applying these architectural insights to an even larger hectare scale.



## USA



We are excited to confirm that the Climate Foundation is part of a consortium **awarded a grant at NASA's Jet Propulsion Laboratory (JPL)**. This grant is dedicated to implementing a kelp growth model within the "Estimating the Circulation and Climate of the Ocean" (ECCO) Consortium's ECCO-Darwin ocean model. This is an important step in building a model for regenerative

kelp cultivation in coastal oceans.

## SANTA CLARA

Dr Brian Von Herzen has been advising **Santa Clara University** students on a multi-year project, and part of the team flew to the Philippines and deployed the initial phases of the



project. In the first year of deployment the students **deployed encoders and telemetry while validating the baseline signal propagation characteristics of telemetry systems across our marine permaculture platforms.**

This data will provide the baseline that can be provided to the second year Santa Clara University students who are

planning to build upon the results of the first year and enable a more fully autonomous operation of the marine permaculture platforms in an unmanned, offshore environment.

## SANTA BARBARA



We have been working with the **Scripps Institution of Oceanography** to enable proposals that can help to raise funds from the US government for projects in the Southern California area. In addition, we now have the ability to engage with the Scripps Institution of Oceanography Research Permitting Office to provide support for the **acquisition of experimental research and development permits** for the deployment, operation and recovery of experimental instruments in order to conduct scientific research relating to marine permaculture in the Southern California area.

## AUSTRALIA

### QUEENSLAND



In Australia, we have been working closely with our partners at the **University of Queensland**. They are helping us simulate multiple flexible architectures that promise to be hurricane resilient underwater. We're **currently testing ring tensegrity designs and structures for their ability to withstand offshore conditions**. Tensegrity structures are strong, resilient, and efficient in terms of material utilization.

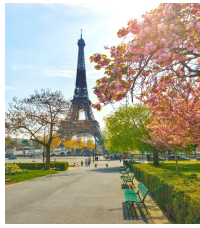
### TASMANIA



And in Tasmania, we provided the **University of Tasmania** with an engineering briefing on the configuration of our platforms in the Philippines to inform their **phase one pilots of the deepwater irrigation platforms for Tasmania** that are to be deployed next year.

## THE WORLD

## PARIS



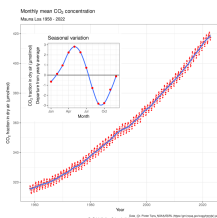
The Climate Foundation has been invited by the European Union commission to provide an installation of culture as part of the **European Union Oceanography Exposition in Paris** this coming October, 2023. The installation will be held at the Muse de Oceanographic where we anticipate providing the immersive kelp forest audio-visual experience to both the participants and the delegates from the 30 countries.

In addition, we plan to share the results of our second year of horticultural studies for vineyards which are facing droughts and heatwaves in Europe. The good news is that vineyards can be made more stress resilient with the use of Climate Foundation's seaweed foliar biostimulants.



## OUTREACH

## YOUTUBES



▶ **What's your Keeling Curve birthdate CO2 measurement?** Brian talks with Better Worlds Ocean Host Kate Wing about watching Greenland ice melt into 100-foot-deep blue water pools and learning how to protect seaweed farms from local communities. He describes the Climate Foundation's technology for mimicking natural upwelling processes – bringing cold, nutrient rich up from deeper water to nourish ocean plant life – as a game-changer for scaling the carbon sequestration needed to meet global climate goals.

▶ **Invest In Earth Day - Brian Von Herzen, Ph.D. : Eco...**  
By combining measures of carbon export with measures of food security, we can better understand the impact of ecosystem regeneration on both the environment and human well-being.

▶ **Episode 540 Kelp and Ice in Hudson Bay**  
Lawrence Martin is a singer and Canadian politician of Cree heritage. Brian von Herzen is an expert on ocean permaculture - especially kelp farming. Peter Wadhams is an expert on Arctic



sea ice and methane. These people discuss two potential projects – to refreeze parts of Hudson Bay year-round, and to harvest kelp and manufacture such commodities from it as bio-stimulant for plants and fodder for ruminant animals to reduce their production of methane from enteric digestion.

### ▶ Solution Series: Ocean-Based CDR Expert Panel

This panel explores Ocean-Based Carbon Removal practices through a climate restoration lens. We discuss its ability to achieve scalable, financeable, permanent, and equitable outcomes and then provide ways for readers to advocate for its safe and thoughtful implementation.



▶ Marine Permaculture The Climate Reality Project, Silicon Valley, and The Sierra Club, Loma Prieta Chapter present a series of monthly educational talks around the theme: "Net-Zero is Not Enough." The series's title reflects that it is no longer sufficient to stop the net emission of carbon dioxide and other greenhouse gases; Creating carbon dioxide is like digging a very deep hole. We can stop producing CO<sub>2</sub> - but then we still have a very deep hole. So in order to fill in the hole **we must begin to remove significant amounts of atmospheric CO<sub>2</sub> and sequester it in long-term storage**

## PODCASTS



### Marine Permaculture & 2040

The feature documentary [2040](#) poses this question: What would the world look like in 2040 if we embraced the best climate solutions already available to us? One such solution involves restoring ocean ecosystems through marine permaculture, a strategy that leverages kelp forests to drawdown CO<sub>2</sub>. More [HERE](#)

**Why Oceans Are The Next Billion \$ Opportunity Of Regenerative Agriculture** Investing in Regenerative Agriculture and Food explores with Brian Von Herzen why kelp, seaweed and ocean regeneration are ready for their breakthrough. Climate Foundation's marine permaculture technology has the potential to provide sustainable food, feed, fiber, fertilizer, and biofuels on a global scale, all while enabling carbon export from the atmosphere. More [HERE](#)

## Bringing Balance To The Ocean

Hilary Langer and Brian Von Herzen discuss the importance of restoring balance to the ocean, how marine permaculture engages populations that depend on the ocean for food, and how his team plans to expand marine permaculture in Asia and around the world. MORE [HERE](#)



<https://podcasts.apple.com/us/podcast/brian-von-herzen-phd-scaling-marine-permaculture/id1559600038?i=1000595644062>

## NEWS

Can submersible seaweed platforms help regenerate ecosystems and provide economic returns? Check out this article by Megan Howell [HERE](#)  
<https://thefishsite.com/articles/can-submersible-seaweed-platforms-help-regenerate-ecosystems-and-provide-economic-returns-marine-permaculture>

## WANT TO HELP?



One way to celebrate your birthday, help the planet and feel a bit self-righteous, is to hold a fundraiser on Facebook for the Climate Foundation. And if you let us know beforehand at [info@climatefoundation.org](mailto:info@climatefoundation.org), then we can help tell everyone about it.

To solve the climate crisis, it is going to take a whole bunch of superpeople to pull this off - including you.



Want another way to help us help the planet? If so, please sign up [HERE](#) to volunteer **and let us know what you excel at and want to do.**



**EASY** - Did you know that an easy way to help us is to post and repost our social media? We are on [Twitter](#), [Facebook](#), [Instagram](#), and [LinkedIn](#). You can find us by our name, "Climate Foundation" and look for our logo

We'd love to see you there!

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Volunteer Editor Rosie Kaplan

Photos by the Climate Foundation Team (and the supporters of UnSplash - Lino-ogenio etc all the other people listed above)

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**If you can, please help with  
a financial donation by going**



[HERE](#)

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