



The Climate and Consumer Opportunity of Blue Foods

July 19th, 2023

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THANK YOU TO OUR DONORS

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SPEAKERS



Courtney Pineau
Executive Director,
Climate Collaborative



Sam Garwin
Director of Market Development,
GreenWave



Courtney Boyd Myers
Founder & CEO,
AKUA



Sophie Egan
Director of Strategy,
Food for Climate League



A World of Aquatic Foods Resources

Empowering chefs, foodservice professionals, and healthcare professionals in promoting bivalves and sea vegetables

**Climate Collaborative Webinar:
The Climate and Consumer Opportunity of Blue Foods**



FOOD FOR
CLIMATE
LEAGUE

FOOD+
PLANET



BUILDERS INITIATIVE

About Us



BUILDERS INITIATIVE
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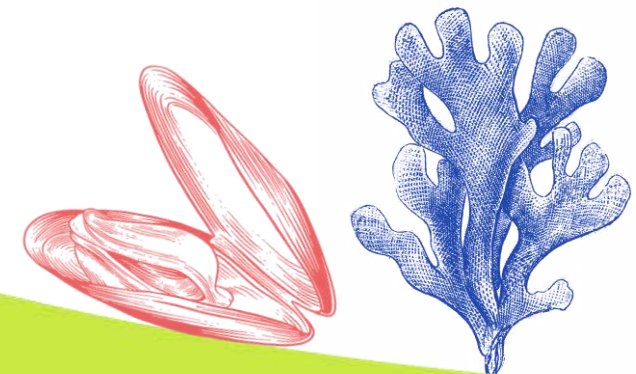
FOOD + PLANET

We are a collective, visionary 501c3 aimed at empowering health professionals to be leaders in sustainable food systems. We envision a science and practice of nutrition that honors nature as the foundation of health through the four dimensions of sustainability.



FOOD FOR
CLIMATE
LEAGUE

We are a trailblazing, women-led 501c3 research collaborative working to make climate-smart eating the norm. We create toolkits, programs, and campaigns—founded in original behavioral science research—that connect sustainable food culture to people's diverse needs, values, and cultures.



The Project Team



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Co-Founder, F+P



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Andrea Occhetta

Project Vision



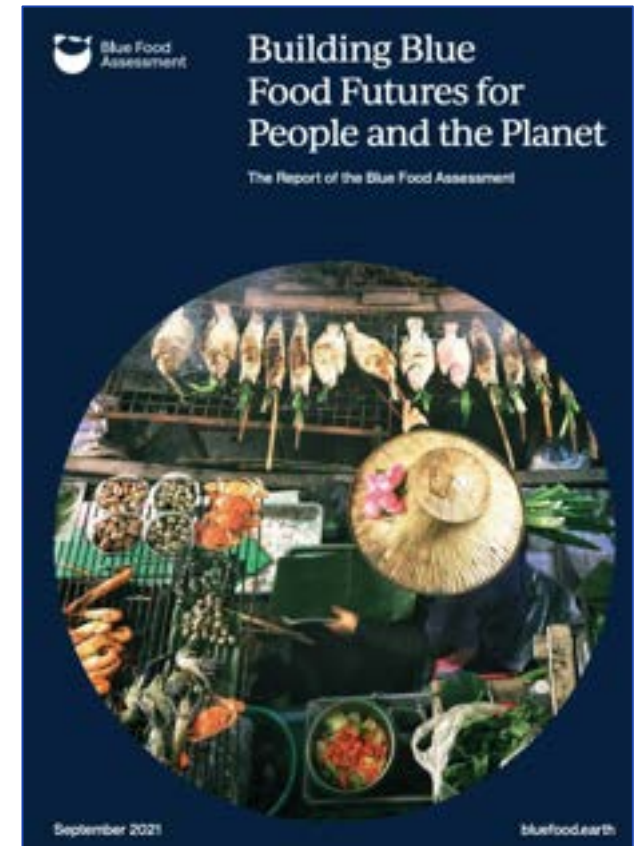
With **funding from Builders Initiative**, the 501(c)3 nonprofits Food for Climate League and Food + Planet developed **evidence-based narratives and nutrition resources to drive demand** for sustainable and nutritious aquatic foods, namely bivalves and sea vegetables.

These **tested narratives** serve a diverse ecosystem of organizations and stakeholders across the food system, including foodservice, culinary, health professional and retail sectors.



The Time for Aquatic Foods is Now

- Key climate solution to help meet the 2030 [Sustainable Development Goals](#).
- Help address widespread **nutritional needs** and **climate goals** and drives **culinary innovation**. Win-win for people and the planet.
Help us shift towards **healthy, equitable, sustainable** food systems.
- Connect seamlessly to today's top food trends, be it **plant-based eating, protein-rich diets, immunity-boosting foods, or climate-smart eating**.



Aquatic Foods Connect Tradition and Innovation



Farming and harvesting the seas while restoring local ecosystems is by no means a new practice.

Indigenous communities around [the world](#) have been sustainably harvesting and farming coastal environments for thousands of years. [Bivalves](#), [fish](#), and [seaweed](#) have a **long history of being cultivated** for use in food, medicine, ceremonies, and coastal protection.

**Together we can create a healthy, tasty, and planet-friendly food future.
Let's dive into this bountiful opportunity!**

Research Methodology

71

academic papers
reviewed

184

organizations engaged
with bivalves and sea
vegetables analyzed

28

trend reports
reviewed

30

health professionals
interviewed

17

healthy dietary
patterns for
compatibility
assessed

1.5K

eaters surveyed
and interviewed

AI

leverage for
cutting-edge
ethnographic insights

200K

people reached
via social media



Delicious possibilities,
just below our shorelines

Help create a delicious, nutritious, and sustainable food future.

DISCOVER HOW

A World of Aquatic
Foods Resources

Toolkit for Health and Nutrition Professionals

A Guide to the Wonderful World of Sea Vegetables

Learn more about the cultivation and qualities of commonly available sea vegetables.^{1,2}

What are Sea Vegetables?

Also called seaweeds, sea greens, sea plants, or "greens from the sea," sea vegetables are a vast, diverse group of edible marine algae and plants that grow in or near the ocean, as well as rivers and lakes.



Dulse
(*Palmaria palmata*)

First harvested in Scotland and Iceland thousands of years ago; today grown in Northern Atlantic and Northern Pacific.

Red (can be crimson, purple, or red-brown) seaweed with smooth fronds and palm-like shape of palmaria family. Provides a rich salty and savory flavor.



Hijiki
(*Sargassum fusiforme*)

Harvested along rocky shorelines of China, Japan, and Korea.

Leafy brown sea algae which is boiled and dried, giving an appearance of small black twigs. Delivers rich savory flavor with hints of earthy mushroom.



Kelp
(*Alaria*, *Saccharina*)

Cultivated in waters of Pacific Northwest and shorelines of New England.

Brown marine algae of which there are nearly 30 edible varieties including sugar, bull, winged, skinny, and ribbon kelp. Delivers rich umami flavor.



Kombu
(*Laminaria*)

Traditionally, cultivated in Japan, also today in Northern Atlantic and along the coasts of Alaska and Washington.

Mature brown algae that's a type of kelp. Typically available in dry, wide strips; rich in glutamic acids that give a deep umami flavor. Key flavor building ingredient in Japanese dashi (broth).



Nori, Laver
(*Porphyra*)

Cultivated historically in East Asia, and recently in North Atlantic Ocean.

Deep purplish-red algae, which turns dark green or brown after drying, toasting, and pressing into thin sheets. Sweet, mild nutty taste with savory notes.



Ogonori, Sea Moss
(*Gracilaria*)

Many varieties across Canada, Maine, British Isles, East Asia, Caribbean, and Hawaii; cultivated in Hawaii, California, and Florida.

Although not technically a "moss," this fluffy sea algae clings to rocks, growing just a few inches high. Fresh has a slightly salty flavor, while dried is the key ingredient in agar, used widely in Asian desserts and plant-based gelatin alternatives.



Sea Lettuce
(*Ulva*)

Widely distributed across the world; commercially grown in California and Florida.

Bright green, very fine marine algae which can grow with a ruffle-edge ("lettuce"), flat, or ribbon shape; has a soft, sorrel-like flavor.



Wakame
(*Undaria*)

Native to many coastal areas, including China, Korea, and Japan; cultivated for centuries in Japan.

Dark green fronds when rehydrated with a subtly sweet flavor and silky texture.

Toolkit for Health and Nutrition Professionals

Clams, Mussels, Oysters, Scallops: Nutrition Highlights



Bivalves, including clams, mussels, oysters, and scallops, are a veritable powerhouse of good nutrition. Bivalves are also one of the most sustainable animal proteins on the planet: they grow abundantly, are low on the food chain, and boast an overall climate impact comparable to that of plant-based proteins.

Nutrition at a Glance for Bivalves:

- Packed with protein**
cooked clams, mussels, and scallops contain 15-20 grams of protein per 3-ounce serving.
- Excellent source of omega-3 fats**
with mussels containing more than 700 mg of DHA + EPA per serving.
- Micronutrient boost**
of vitamin B12 and other essential minerals, including zinc, choline, and selenium. Mussels and oysters contain more iron than red meat.



Nutrient Content of Common Bivalves

- Good source (10-19% DV)
- Excellent source (≥ 20% DV)

	Energy	Protein	Total Fat	Carbohydrate	Omega 3 (DHA+EPA)	Choline	Iodine	Iron	Magnesium	Phosphorus	Potassium	Sodium	Zinc	Selenium	Vitamin A RAE	Thiamin	Riboflavin	Niacin	Folate	Vitamin B12	Vitamin C
Serving Size 85 g cooked	kcal	Grams	Mg	% Daily Value (2000 kcal diet)																	
Clams (baked)	126	15	5	4	121	14%	37%	10%	6%	17%	2%	12%	7%	59%	15%	1%	4%	2%	7%	421%	0%
Mussels Blue (steamed)	146	20	4	6	702	11%	63%	32%	10%	19%	9%	36%	28%	138%	11%	23%	32%	17%	16%	850%	15%
Oysters (baked)	88	10	6	3	349	14%	62%	27%	6%	8%	6%	14%	519%	38%	4%	1%	8%	6%	7%	327%	0%
Scallops (steamed)	94	17	1	5	154	19%	91%	3%	10%	29%	10%	28%	16%	34%	0%	1%	2%	6%	4%	76%	0%

Species and geographic diversity can impact the nutrient composition of bivalves. ¹Source: USDA Food Central Database, 2016

REFERENCES

Toolkit for Health and Nutrition Professionals



Clam Noodles with Crispy Shallots

Clams are the perfect pairing for pasta, along with crispy shallots and an herbal ginger-soy sauce. Affordable, delicious, and packed with protein, this recipe can be the star of your meal.



Makes 2 servings



Preparation Time:
30 minutes

Ingredients:

Crispy shallots:

3 tablespoons canola oil
2 shallots, peeled and thinly sliced crosswise, about 1/16-inch thick or the thickness of a quarter (see Notes)
½ teaspoon salt

Noodles with clams:

5 ounces dried linguine or spaghetti pasta
1-inch piece of ginger, peeled, cut into thin strips
2 cloves garlic, peeled and thinly sliced
¼ fresh serrano chili pepper, seeded, thinly sliced (optional)
12 ounces frozen cooked clams, defrosted (or 1 pound of fresh/frozen clams or mussels in the shell)
2 tablespoons soy sauce, reduced sodium
5 sprigs fresh cilantro, leaves and stems, roughly chopped (about 2 tablespoons)
1 teaspoon sugar



Seaweed Caesar Salad

This satisfying, flavorful salad is brimming with health benefits and nutrition by way of two types of seaweed (kelp and nori), along with leafy green vegetables, and healthy fats. Simple and rustic, but saturated with tastes and textures, this salad is the perfect compliment for any meal, from soup to sandwiches.



Makes 8 servings



Preparation Time:
20 minutes

Ingredients:

Seaweed Caesar Dressing:

¼ cup raw cashews
Boiling water
¼ cup plant-based milk*
1 tablespoon tahini
¼ lemon, juiced (1 tablespoon)
½ tablespoon Dijon mustard
½ tablespoon capers, rinsed, drained
1 tablespoon nutritional yeast
½ teaspoon sea kelp flakes seasoning
1 garlic clove
½ teaspoon black pepper

Salad:

1 large (1 pound) bunch romaine lettuce, chopped
3 tablespoons capers, rinsed, drained
¼ cup chopped nori seaweed
1 cup croutons
¼ cup vegan or regular Parmesan cheese

CPG and Foodservice Toolkits for Sea Vegetables

Top 3 Messaging Themes

HEALTH



SUSTAINABILITY



VERSATILITY



+89%

Eaters' interest in sea vegetables is poised to grow by 89%
in the next 1-2 years, moving sea vegetables into
mainstream acceptance.

MotivBase. 2022.

CPG and Foodservice Toolkits for Sea Vegetables

Top 3 Tips

Compare them to land-based vegetables.

Visually present them as convenient everyday foods.

Call seaweeds sea vegetables.




Stacked Sea Veggie Burger
Grilled superfood patty layered with avocado, fresh tomato and crunchy sprouts.



33%

of U.S. eaters surveyed say they don't consume sea vegetables because they're simply unaware of them.
Maine Aquaculture Innovation Center. n.d.

Ecosystem

 Aquatic Foods

Toolkits About Research Ecosystem

Ecosystem

This network map is intended as a living platform to reflect the passionate, growing ecosystem of supporting the movement for sustainably produced aquatic foods.

Our communications toolkits aim to **support the existing ecosystem of diverse stakeholders** who work on bivalves and sea vegetables. Our intention is to equip these colleagues—from entrepreneurs and to ocean farmers and food service professionals, from NGO leaders and think tank experts to independent researchers—with tested messages and narrative strategies to make their own marketing and communications even more resonant with their target audiences.

Hover over elements within the ecosystem to the right to see connections by region and use the filters to see which type of products each stakeholder focuses on. You can also use the dropdown filters at the top of the window to see only certain types of stakeholders or product types at a time—or, switch from “Stakeholder View” to see stakeholders as points on the world map. (Note: make sure all regions are clicked at the top of the geo view window).





Become a part of this mission.

Let's collaborate

Help us shape the narrative and drive demand for sustainable aquatic foods.

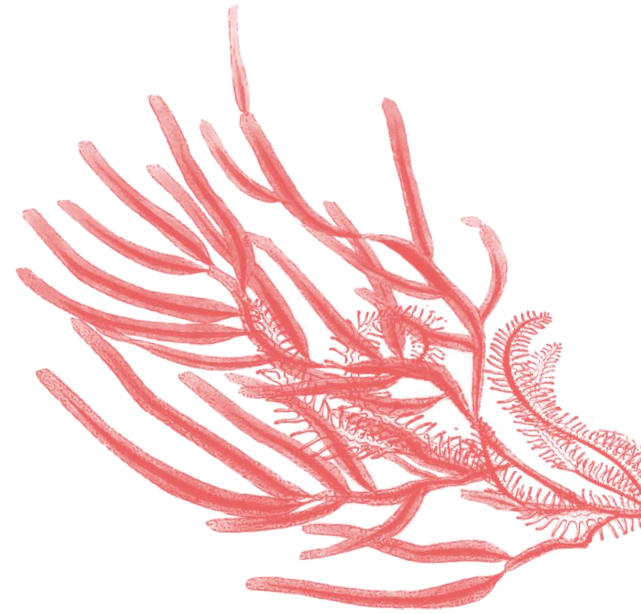
Sophie@FoodforClimateLeague.Org



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Thank You!



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**FOOD +
PLANET**

Bringing Kelp from Sea to Table

The opportunity for CPGs to build a new, blue economy



Sam Garwin
Director of Market Development

Seaweed 101

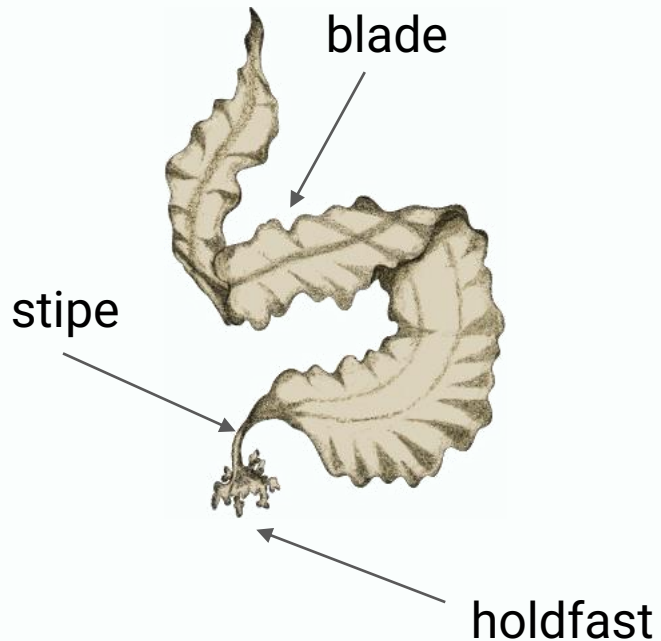
A seaweed primer

1. Seaweed belongs to the *algae* family

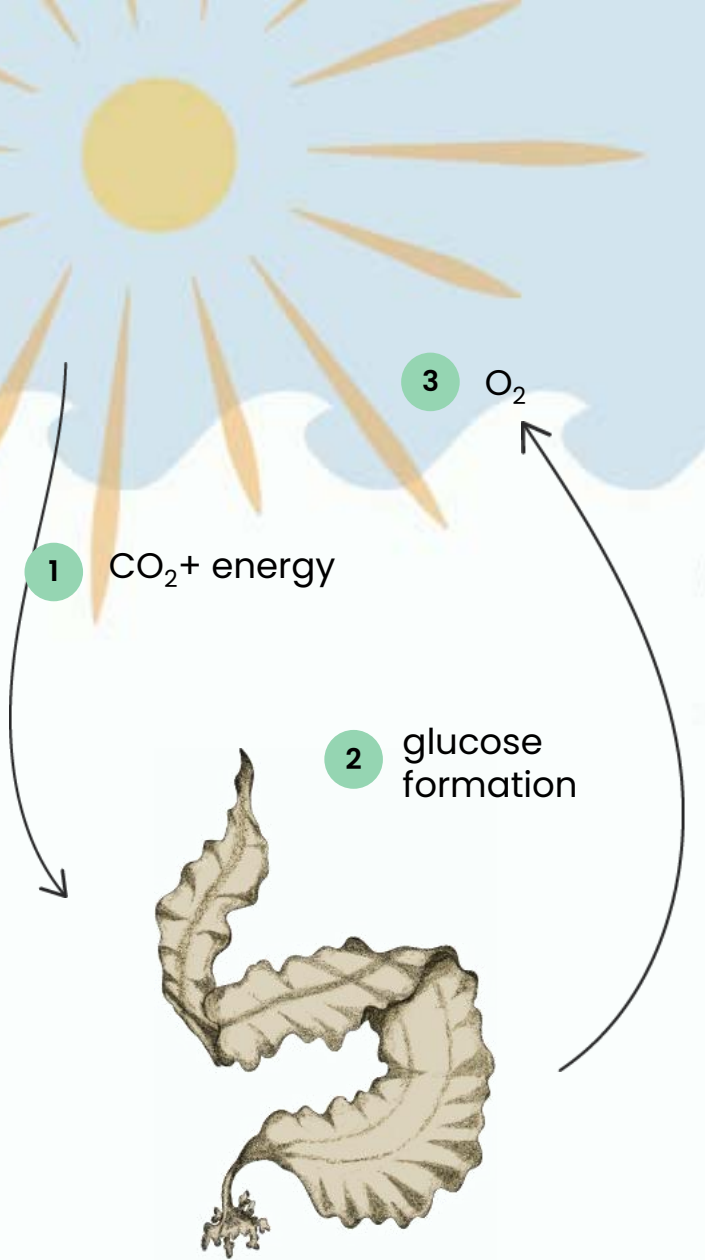
- How big is it? (macro vs. micro)
- Where does it grow? (fresh vs. salt water)
- What color is it? (green, red, or brown)

Seaweed → saltwater macroalgae

Kelp → a family of brown seaweed



A seaweed primer



Photosynthesis

1. Seaweed belongs to the *algae* family

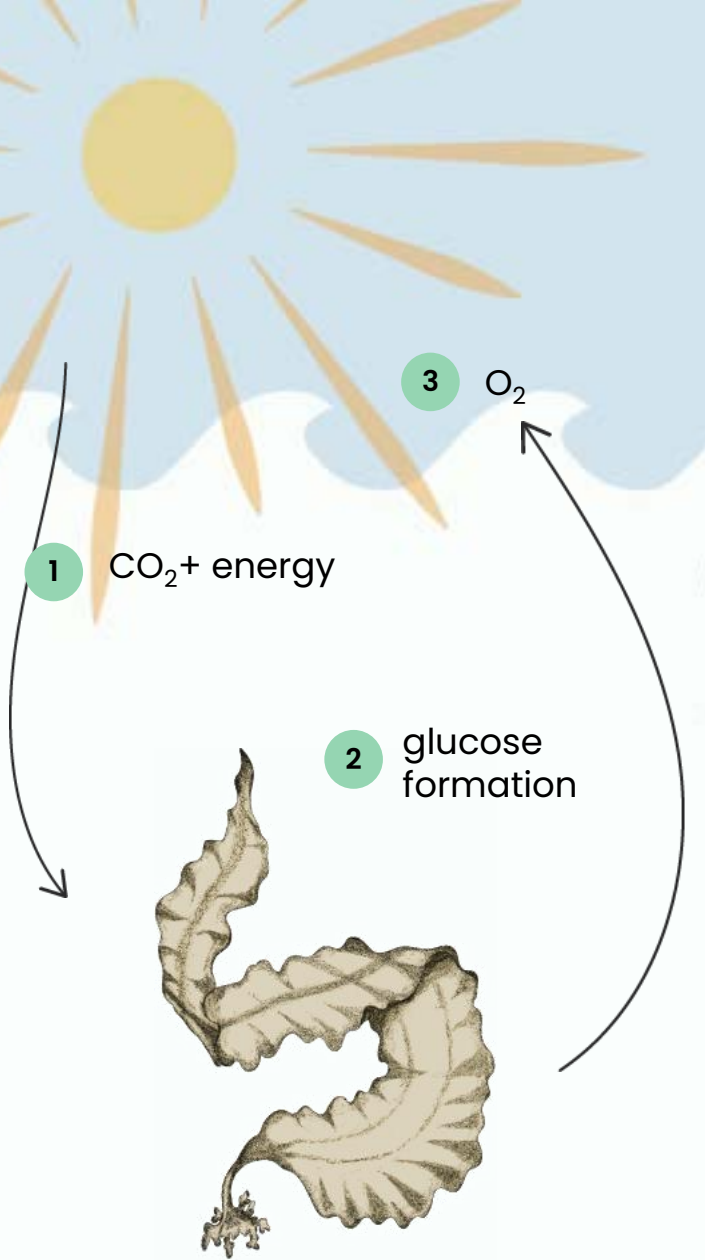
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1. Seaweed absorbs carbon dioxide faster than any land-based plant

A seaweed primer



Photosynthesis

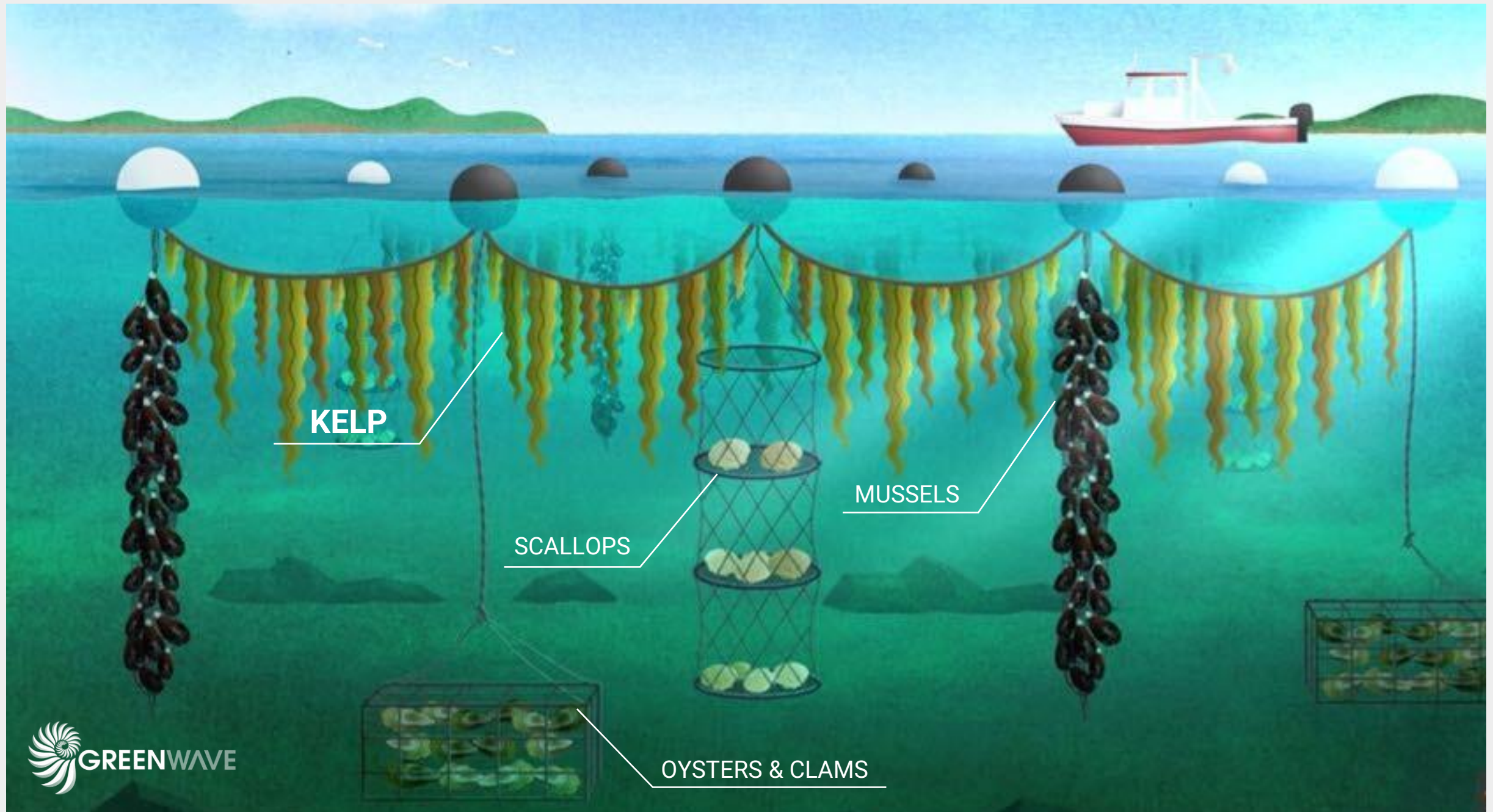
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- What color is it? (green, red, or brown)

Seaweed → saltwater macroalgae

Kelp → a family of brown seaweed

1. Seaweed absorbs carbon dioxide faster than any land-based plant
2. Seaweed is the foundation of the ocean ecosystem



KELP

MUSSELS

SCALLOPS

OYSTERS & CLAMS

Farmed kelp is the most sustainable crop on earth



freshwater



fertilizer



absorbs CO2



rebuilds ecosystems



arable land



superfood



income diversification

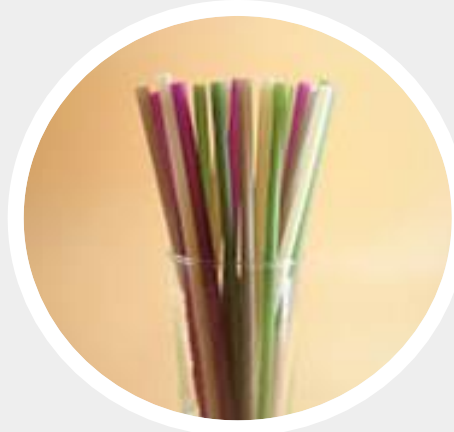
One crop, Many uses

High margin,
low volume



Food

- Seasonal fresh crop
- Ingredients
- Value-added products
- Nutraceuticals



Bio-Materials

- Coatings & films
- Packaging
- Fabrics & textiles



Agriculture

- Animal supplements
- Bio-stimulants

Low margin,
high volume



We train and support
regenerative ocean farmers in
the era of climate change.

Goal: Train 10,000 farmers by 2030





**Training &
Support**



**Climate
Subsidies**



**Market
Development**



**Farmer
Infrastructure**

Program Areas

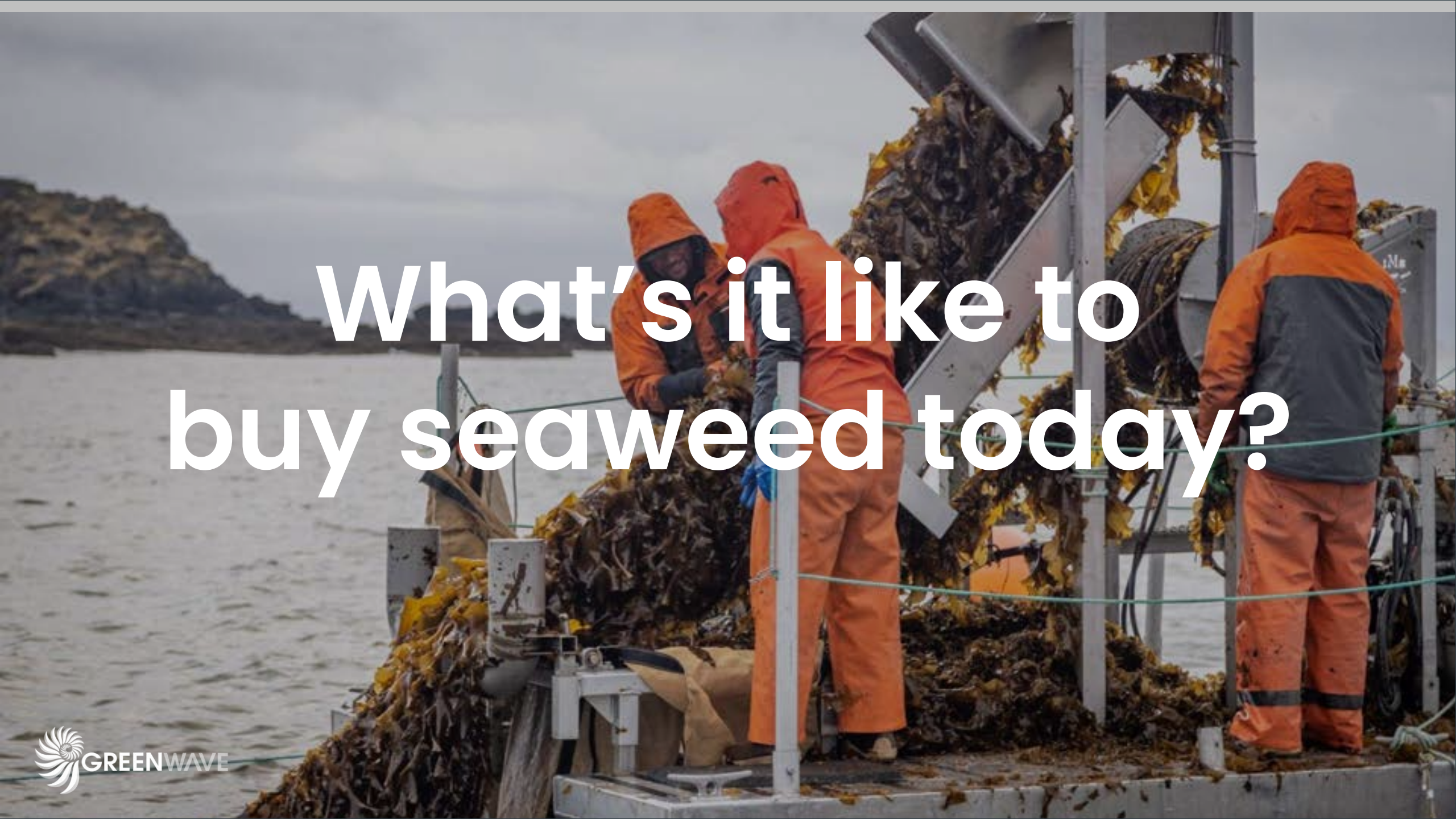
GreenWave identifies barriers to growth, develops solutions, and disseminates best practices back to the field through four program areas



We work alongside ocean farmers, processors, and buyers to coordinate supply and demand for seaweed, shellfish, and the ecosystem services provided by these crops.

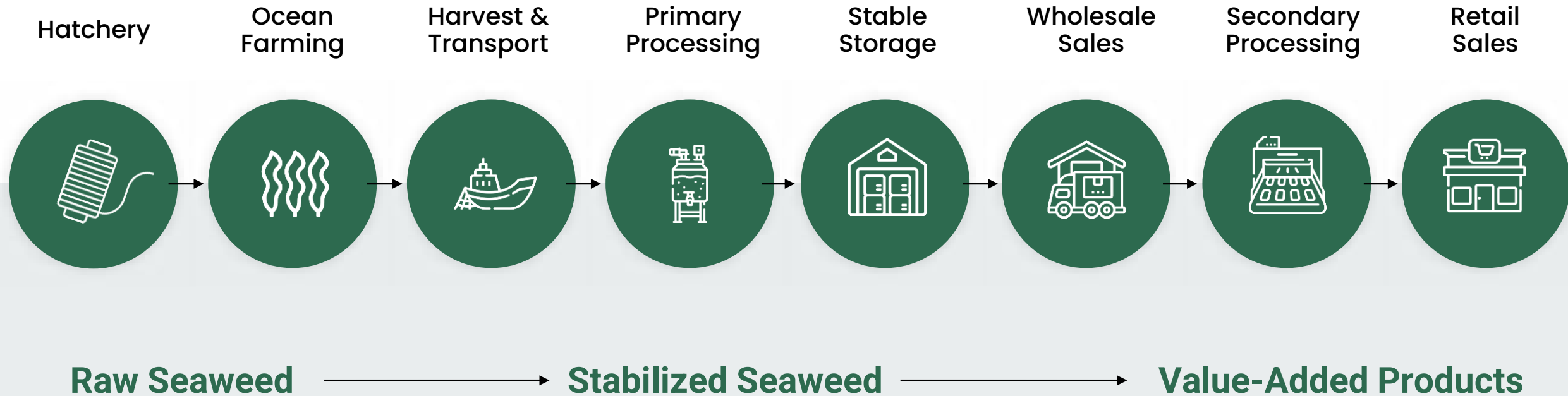
Our goal is to support the evolution of an equitable, diverse, and transparent value chain.



A photograph showing three workers in orange protective suits harvesting seaweed on a boat. They are using a large mechanical conveyor system to move the seaweed. The background shows a body of water and a hilly coastline under a cloudy sky.

What's it like to buy seaweed today?

The Seaweed Value Chain



Our Vision: Regional “Reefs”



25–50 networked farms



Land-based hatchery and processing hub



Values-aligned start-ups, CPG companies, and institutional buyers



Purchasing Landscape

- ~5 relatively small, partially vertically integrated companies contract, process, and sell most of the farmed seaweed in the US
- Independent farmers are eager to form direct relationships with buyers, but a third party is often needed to support with processing
- Because of the long annual growing season, forward contracts are critical to secure supply
- Availability of certain formats (dried) is currently limited due to processing bottlenecks
- Food safety regulations, quality standards, and testing protocols are actively under development



Early CPG kelp innovators



A close-up photograph showing a person's hands in blue nitrile gloves pouring organic waste, such as food scraps, from a cardboard box into a large metal bin. The bin is already filled with similar waste. In the background, several more cardboard boxes are stacked. The scene is brightly lit, suggesting an indoor facility like a composting plant or food waste processing center.

The Opportunity for CPGs

1. Unlock new flavors, textures, and health benefits.

With just a 5-20% inclusion:

- Enhance flavors by harnessing umami without salt
- Boost micronutrients, including: vitamins C, K, E, A, B-12, antioxidants, iodine, iron, zinc, magnesium, calcium, and omega-3's
- Create vegetarian and vegan foods with moist textures and craveable flavors
- Harness nutraceutical effects including blood sugar regulation, anti-inflammatory properties, gut health, and brain health

2. “Replace and displace” to reduce climate impact

Review your product portfolio to see if seaweed can replace ingredients that:

- Are produced fossil fuel intensive production methods
- Require large amounts of water or arable land
- Depend on practices that negatively impact soil health, water or air quality
- Negatively impact quality of life in communities where they are produced

3. Build a regenerative, equitable industry from the ocean up

How might we...



Weave social justice into the fabric of the ocean economy?



Ensure that everyone in the value chain is equitably compensated?



Scale through replication, rather than consolidation?



Innovate through collaboration in addition to competition?



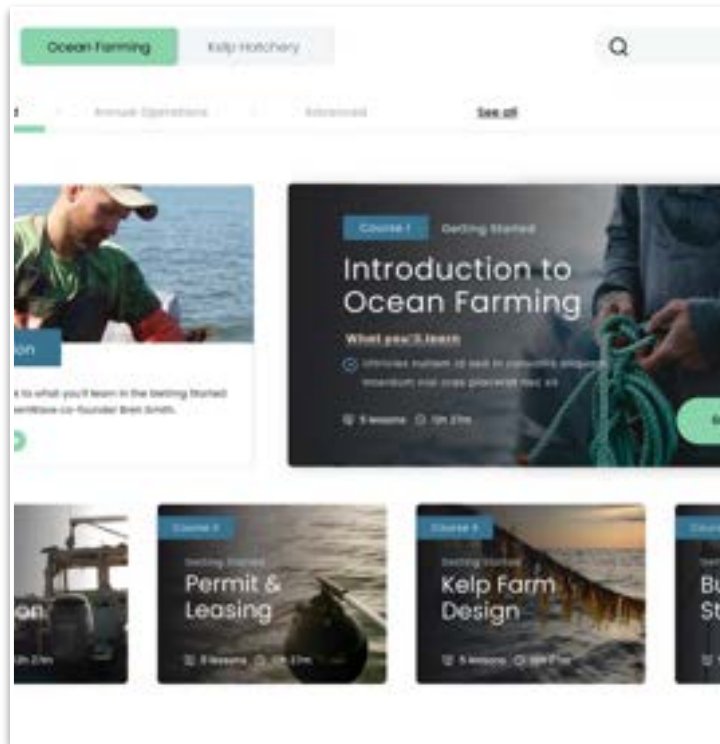
Maintain values-alignment throughout the supply chain?



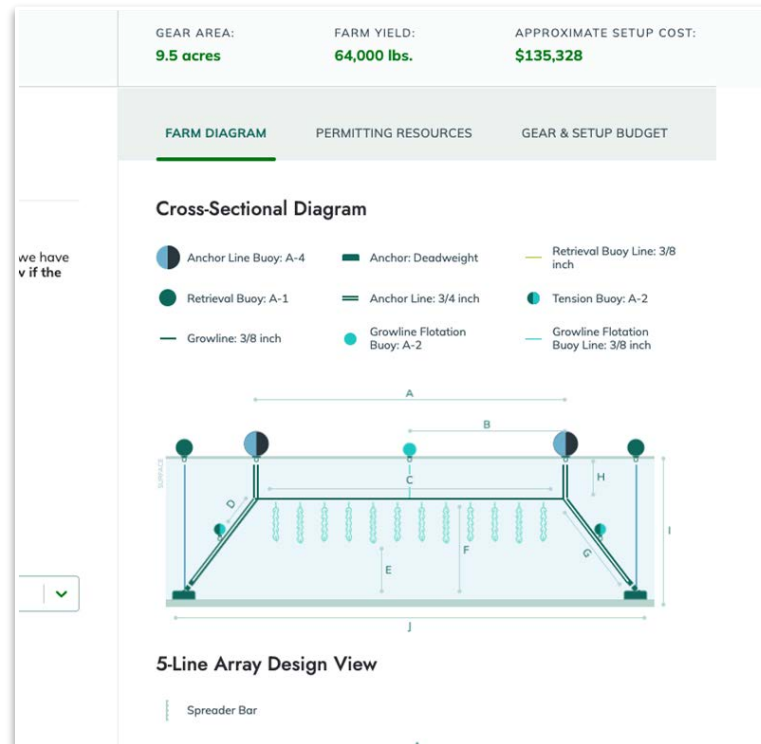
How GreenWave Can Help

The Ocean Farming Hub

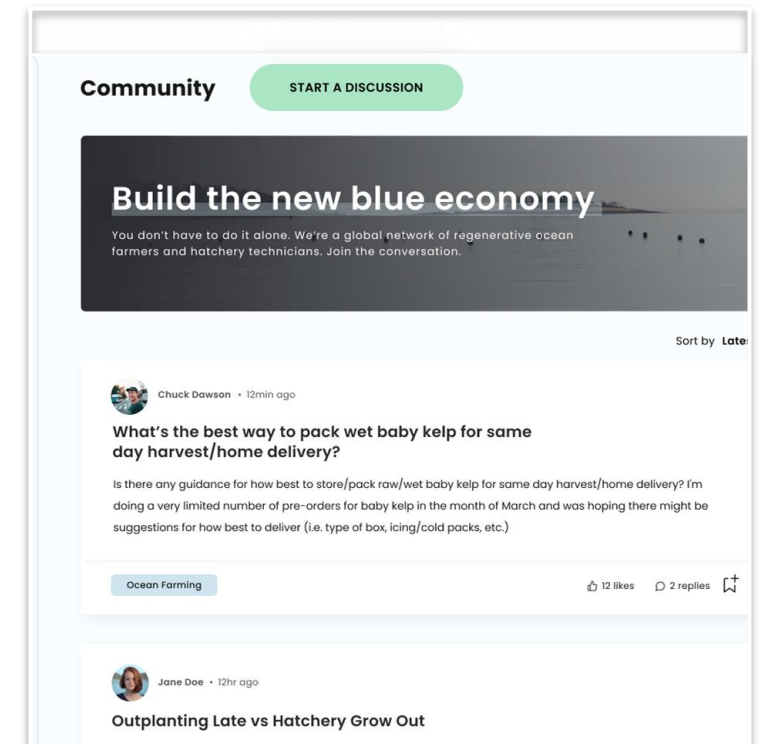
Scaling training & support for the kelp value chain



Curriculum



Tools



Community



Sample Program

Species: Sugar kelp, bull kelp (limited)

Provenance: Alaska, USA

Seasonality: Annual harvest each April-May

Flavor: Umami, salty, delicately vegetal

Format: Fresh-frozen, vacuum sealed

Handling: Store frozen, refrigerate to thaw, use within 2 days of defrosting

Sizes: 5 or 10 lbs

Recommended Applications:

soups	ferments
smoothies	pickles
sauces	toppers
dressings	meal kits
seasonings	plant-based proteins



FARM FRESH BULL KELP

Regeneratively farmed kelp from the clean waters of Alaska. Kelp is one of the most nutrient-dense and sustainable plants in the world, rich in vitamins and minerals like potassium, iodine, iron, and calcium.

INGREDIENTS: Bull kelp (*Nereocystis*)

ALLERGENS: May contain trace amounts of shellfish

FLAVOR PROFILE: Savory, salty, delicately vegetal

FORMAT: Fresh-frozen, vacuum sealed

SHELF LIFE: Store frozen for up to 1 year

HANDLING INSTRUCTIONS: Store frozen, refrigerate to thaw, keep refrigerated and use within 2 days of defrosting

APPLICATIONS:

Stipes - pickles, ferments, toppers, salsas
Blades - soups, smoothies, sauces, dressings, seasonings, chips



← **Sign up here!**

CONTACT FOR PURCHASE: MARKETINNOVATION@GREENWAVE.ORG



Where supply meets demand

A space for companies in the seaweed industry to connect, interact
and grow.

APPLY NOW →

Already have an account? [Login](#)



Good Afternoon Bren!



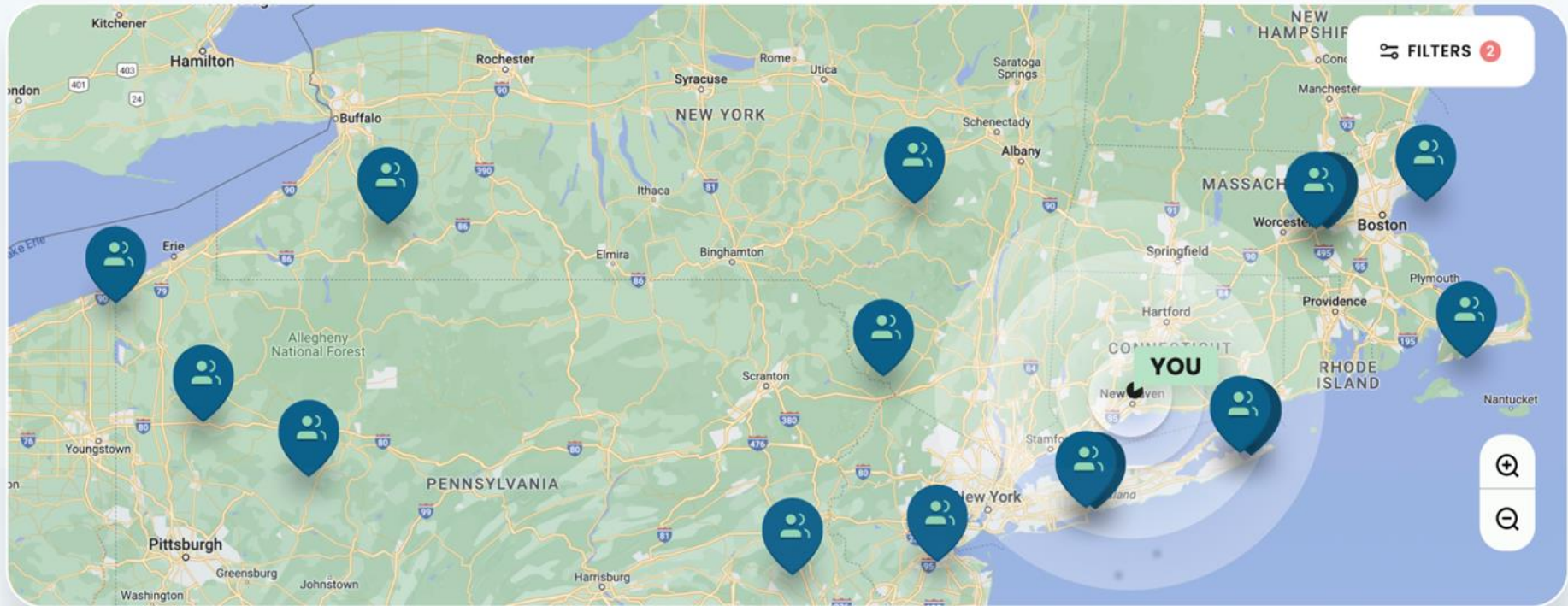
GreenWave



Profile Completion
Finish setting up your profile



Active Listings




**Get to
know**



GreenWave

Provide training and support to the seaweed industry

📍 City, State




**Get in
touch**

Need help finding a supplier or making a sale?

We're here to support you in expanding your network and growing your business.

CONTACT NOW





All

Saved

My company

Sort by Near me ▾

FILTERS 2

Filters



Distance from you

< 50 mi >

Value Chain Activity

Seed producing

Farming

Processing

Purchasing

Species



Sugar Kelp
Saccharina
latissima



Skinny Kelp
Saccharina
angustissima



Alaria
Alaria spp.



Bull Kelp
Nereocystis
luetkeana



Giant Kelp
Macrocystis

CLEAR ALL

SHOW 55 RESULTS





Blue Evolution

company description copy

What we do



Grows
Seaweed



Processes
Seaweed

Available Seaweed

Capacity 50-70K wet lbs annually



Sugar Kelp
Saccharina latissima



Skinny Kelp
Saccharina latissima



Wakame
Scientific name

Format

whole

stipe only

Stability

fresh

frozen

dried

milled

Company Details



Founding Year
2017



Farm Size
1.5 Acres

Ac viverra nulla fermentum sagittis. Maecenas vitae vestibulum nunc vulputate nec. Hendrerit massa dui laoreet imperdiet elementum euismod nunc velit viverra.

Media



SAVE PROFILE



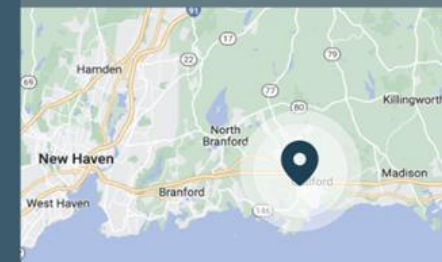
SEND MESSAGE



harvestinc.com



Guilford, CT, US



Active Listings

1 week ago

Looking for partners

2 weeks ago

Need sugar kelp spools



greenwave.org/seaweed-source

Samantha Garwin
Director of Market Development
sam@greenwave.org





a regenerative food company
on a mission to make blue
foods like seaweeds a more
prominent part of our food
systems.



WHAT ARE BLUE FOODS?

- Animals, plants, algae
- Harvested from lakes, rivers & oceans
- Provide protein & nutrients to over 3B people
- Employs 800 million people worldwide



AKUA'S PRODUCTS

AKUA CREATES THE WORLD'S MOST DELICIOUS, NUTRITIOUS & SUSTAINABLE PLANT-BASED MEAT & SEAFOOD ALTERNATIVES FROM REGENERATIVE AQUACULTURE & SELLS INTO RETAIL, FOOD SERVICE, AND ONLINE.



SIGNIFICANT TRACTION

SOLD
IN 1000+
STORES & 30
restaurants

LAUNCHED 3
NEW SKUS
PER YEAR
SINCE 2021

40,000
ONLINE
SUBSCRI
BERS

2nd
FASTEST
GROWING PB
COMPANY

5 STARS
ON 450+
ONLINE
REVIEWS

60%
REPEAT
CUSTOMER
RATE

10X RETAIL
REVENUE
GROWTH IN
6 MONTHS

RATED THE #1
BEST VEGGIE
BURGERS IN
AMERICA IN
FOOD
SERVICE



bon appétit

HEALTHYISH LOVES IT

The Perfect Frozen Veggie Burger Doesn't Exi—

AKUA's salty-smoky kelp burgers are all I want to eat this summer.



FORTUNE

ENVIRONMENT · AGRICULTURE

The seaweed superfood revolution could end world hunger—and save the planet

"Oceans cover more than 70% of the world's surface and yet contribute to 2% of the world's food. Seaweed remains an untapped food source — potential. The UN's Food and Agriculture Organization even went so far as to describe seaweed as a "precious ally" in the fight against hunger."



Seaweed is a vastly underutilized resource for food and carbon sequestration.

The New York Times

Seaweed to the Rescue

How Will We Eat in 2023? Here Are 10 Predictions.

Briny flavors, high-end Jell-O shots, a fascination with outer space and a concern for Earth will guide our choices. At least that's what the food forecasters say.

#2: PLANT-BASED SEA(WEED)FOOD!



WholeFoods MARKET

Whole Foods Market's Top 10 Food Trends for 2023

Help From Kelp

As consumers look for alternative ingredients and experiment with new flavors, nutrient-rich, eco-friendly kelp-inspired foods are gaining popularity.

LOCALLY SOURCED WITH BIG IMPACT

WE SOURCE 100% OF OUR KELP FROM NEW ENGLAND-BASED, REGENERATIVE OCEAN FARMERS WHO GROW NUTRIENT-DENSE FOOD WITHOUT USING FRESH WATER, DRY LAND, FERTILIZER, OR FEED WHILE REMOVING VAST AMOUNTS OF CARBON FROM OUR SEAS, HELPING TO REVERSE CLIMATE CHANGE.





WE SELL KELP

IN PARTNERSHIP WITH

THE **CROP PROJECT**

FRESH FROZEN OR DRIED



**FRESH FROZEN
ATLANTIC KELP
CHOPPED**

8lb or ~4kilo bag



**ATLANTIC KELP FLAKES
& POWDER**

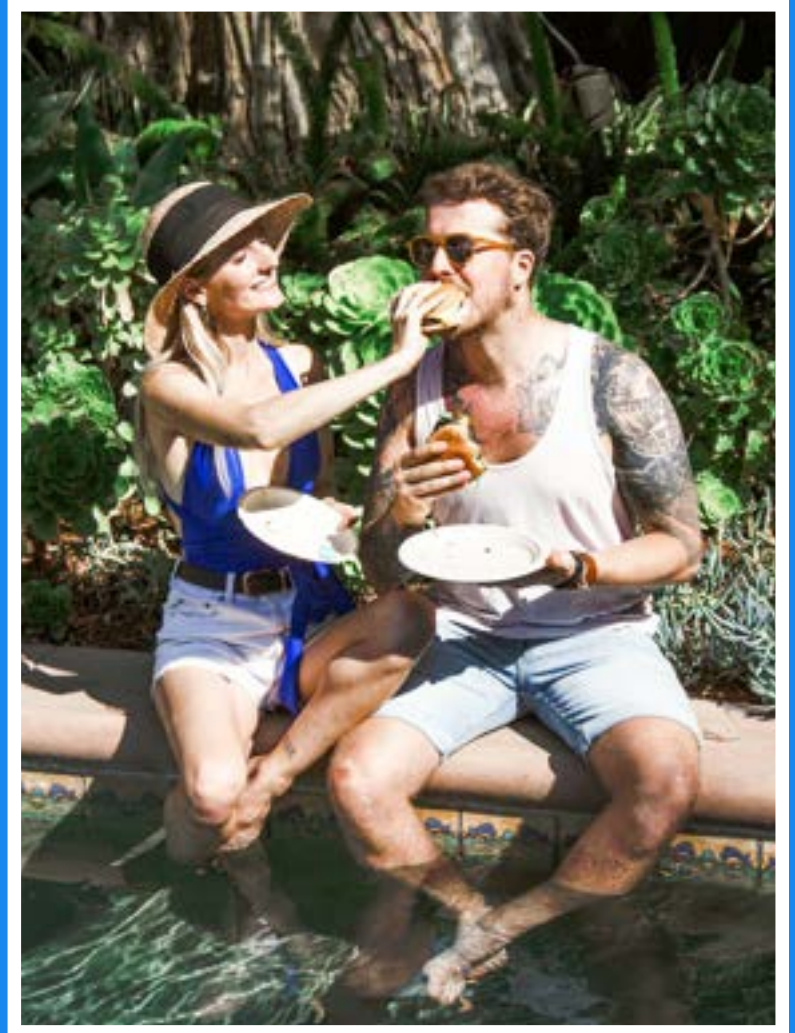
Dried & Milled to 20, 40 or
80 mesh

THE BIG OPPORTUNITY

AMERICA WANTS TO EAT MORE KELP....

.... BUT DOESN'T KNOW HOW!

- seaweed is the fastest growing source of food ([BBC](#)) & is consistently named one of the TOP health trends in wellness.
- Today only 10% of all grocery stores sell seaweed (and most of that is pre-packaged sushi).
- If they do sell it, 98% is imported from China, Japan, or Korea.



WHY KELP?



LOCALLY
SOURCED

AKUA SOURCES 100% OF OUR KELP FROM NEW ENGLAND-BASED, REGENERATIVE OCEAN FARMERS WHO GROW NUTRIENT-DENSE FOOD WITHOUT USING FRESH WATER, DRY LAND, FERTILIZER, OR FEED WHILE REMOVING VAST AMOUNTS OF CARBON FROM OUR SEAS, HELPING TO REVERSE CLIMATE CHANGE.

- IMPROVES BONE DENSITY AND CELLULAR HEALTH
- BOOSTS HYDRATION & METABOLISM
- ANTI-INFLAMMATORY

KELP
FOR 
YOUR
HEALTH

KELP REMOVES MORE CO₂ FROM THE OCEAN THAN LAND-BASED PLANTS DO FROM THE AIR PLUS REQUIRES NO DRY LAND OR FRESH WATER TO GROW.

KELP
FOR 
THE
PLANET

ACCORDING TO THE WORLD BANK, FARMING SEAWEED IN JUST 0.1% OF THE WORLD'S OCEANS COULD CREATE 50 MILLION DIRECT JOBS.

KELP 
FARMING
FOR THE
ECONOMY



KELP

FOR



YOUR

HEALTH

Better Sleep

Seaweed is high in an amino acid called tryptophan. It's used by the brain to create melatonin & studies show higher levels of tryptophan in the body = higher levels of melatonin.

Nutrient Dense

Kelp is one of the only foods that actually expands in your stomach! It leaves you feeling full and satisfied for longer. It also gives your body a metabolic boost!

Omega-3s

Found in fish, nuts, and you guessed it... KELP! Omega 3 fatty acids can combat inflammation, helping to reduce joint pain and stiffness.

Rich in Iodine

Naturally occurring in kelp, iodine is important for balancing the thyroid system and ensuring the metabolism is working at its top functionality. Iodine is also [said to maintain](#) healthy brain activity as well as help with brain development in children.

Improves Bone Density

Kelp is a great source of [Vitamin K](#), a key vitamin for supporting bone density & helping to prevent issues like osteoporosis or arthritis.

Hydration

Kelp allows your body to retain moisture & stay hydrated which will allow you to feel more energized throughout the day with glowing, flake-free skin.

Weight Loss

Kelp is a superfood from the sea, packed full of key vitamins & minerals your body needs to properly function and thrive!

Antioxidants

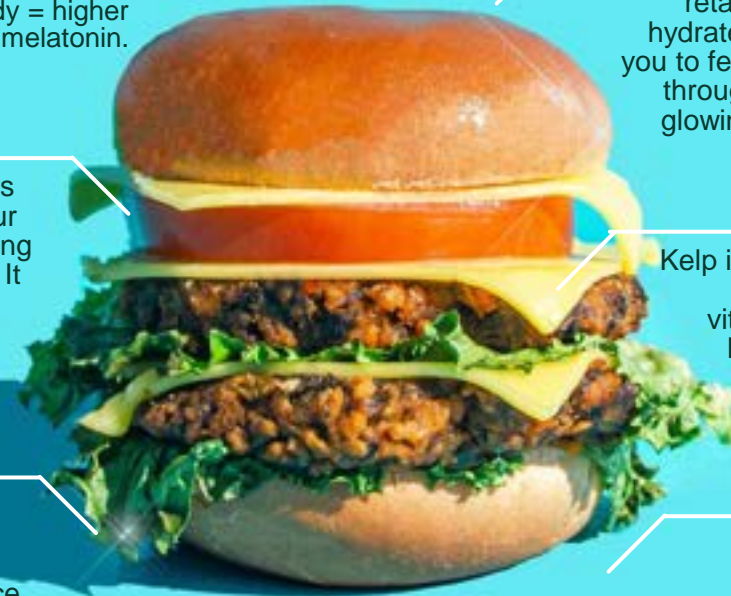
Kelp is packed full of antioxidants. This helps protect your skin against UV rays as well as everyday air pollution.

Vanadium

A naturally occurring trace mineral in Kelp, it works to balance your body's blood sugar and handle stress more effectively.

Anti-Inflammatory

Kelp contains Fucoidan, a polysaccharide which is known to be an anti-inflammatory. Scientists have also linked it to reducing cholesterol levels!



MORE MICRONUTRIENTS THAN ANY OTHER BURGER



- PLANT-BASED/VEGAN
- HIGH-PROTEIN
- GLUTEN FREE
- SOY FREE
- ZERO ADDED SUGAR
- FREE OF PRESERVATIVES
- ZERO METHYLCELLULOSE
- NO MSG
- NON-GMO
- VEGAN
- REGENERATIVE AGRICULTURE



Calcium 88mg	7%
Iron 2mg	12%
Potassium 245mg	5%
Vitamin A 192 IU	21%
Vitamin C 2mg	3%
Vitamin K 12mcg	10%
Thiamin 1mg	73%
Riboflavin 1mg	72%
Niacin 6mg	35%
Vitamin B6 1mg	51%
Folate 70mcg	18%
Panthothenic Acid 1mg	11%
Magnesium 40mg	10%
Phosphorus 160mg	13%
Zinc 1mg	7%
Selenium 4mcg	8%
Omega-3 10g	7%

FINALLY, A BURGER THAT LEAVES YOU
FEELING GREAT.



HELPING KELP GO MAINSTREAM

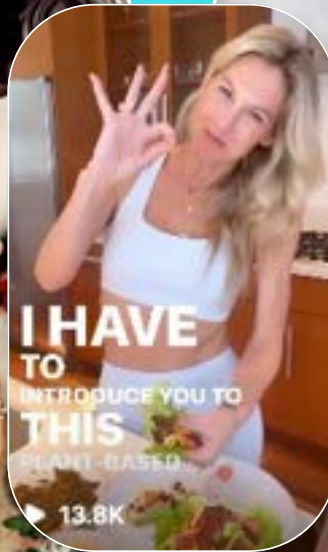
- **Product market fit**
- **Working with celebrities and influencers...**
- **And SpongeBob**



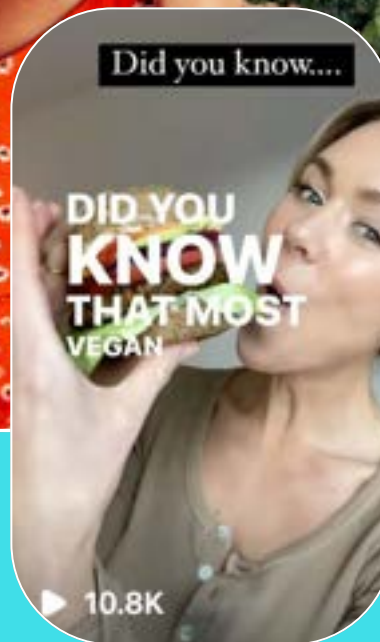
@CHELSEAKAUAI
1.2M followers



▶ 21.4K



▶ 13.8K



▶ 10.8K



@CMITTY 1.6M
followers



vegan bánh bao

▶ 13.9K



▶ 40.7K

OUR SOLUTION IN ACTION



**AKUA has purchased
120,000 lbs
of ocean-
farmed kelp**

**RESPONSIBLE FOR
REMOVING 7.5
TONS OF HARMFUL
CO2 FROM OUR
SEAS**



**AKUA has sold
300,000+
kelp burgers**



**AKUA has sold
6,000 lbs+
of ground meat**

**AVOIDING NEARLY 1 MILLION POUNDS
OF ADDITIONAL CO2 THAT WOULD'VE
BEEN PRODUCED BY THE EQUIVALENT
POUND FOR POUND OF FACTORY-
FARMED RAISED BEEF.**



**AKUA has sold
10,000+
krab cakes**

**WITHOUT HARMING A
SINGLE CRAB,
LEAVING 10,000 HAPPY
CRABS IN THE SEA!**

***STATS AS OF 12/31/2022**

THANK YOU!



DISCUSSION



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Climate Collaborative



Sam Garwin
Director of Market Development,
GreenWave



Courtney Boyd Myers
Founder & CEO,
AKUA



Sophie Egan
Director of Strategy,
Food for Climate League