

cellana™ + PHYTOSMART™

Commercializing the New Generation of Omega-3s

High-value pet and human supplements today. High-volume
plant-based proteins, pharma, and biofuel products tomorrow.

PHYTOSMART.COM/CELLANA



THE CELLANA + PHYTOSMART MERGER

1 + 1 = 5 Ways to Win. And We Can Count the Ways.

CELLANA — 15 YEARS OF PRODUCTION SCIENCE AND IP

Founded to solve the outdoor algae production cost and consistency problems.

Over 15 years of industrial-scale outdoor production in Hawaii, Florida, Arizona, Georgia, and California.

Raised \$90MM+ in non-dilutive funding — including a \$70MM Shell joint venture & \$22MM in government grants — to de-risk the platform before any dilutive raise.

Key IP: Patented ALDUO™ hybrid production system — the breakthrough that makes large-scale, outdoor algae production economically viable at scale. All foundational de-risking accomplished with under \$8MM in dilutive capital.

High capex, low opex for multi-product biorefineries of extracted product streams.

PHYTOSMART — CONSUMER BRAND & COMMERCIALIZATION ENGINE

Built a consumer-facing DHA omega-3 supplement brand from scratch, proving that whole-cell algae pet supplement products can win in the market.

Developed the patented SPAGS™ (Sterile Plastic Algal Growth System) for controlled indoor cultivation.

Reached Amazon and D2C sales with 7 active products and repeat purchasers.

Won the 2024 Overall Pet Innovation Award (Overall Pet Healthcare Innovation of the Year)

Low (zero) capex, high(er) opex for high-value, whole-cell supplements and food ingredients; modular/linearly scaleable.

Two complementary but different technologies: Cellana (EPA), PhytoSmart (DHA), together now.

THE CELLANA + PHYTOSMART MERGER

What investors inherit from this history.



\$93MM+ (non-dilutive capital) in validated production R&D
— already spent, not a future cost.



Two key issued patents protecting the production process
(U.S. Patent #11,293,000 covering the SPAGS™ production system; US Patent 7,770,322 for ALDUO production system)



A live consumer brand with market-validated products,
repeat customers, and award recognition.



A combined leadership team with deep expertise across algae science,
pharma commercialization, pet nutrition, industrial and ag biotechnology,
and investment banking — rare for a company at this stage.

WHY THE COMBINATION CHANGES EVERYTHING

Cellana had the science, production IP, and industrial-scale proof — but no consumer brand or commercial infrastructure. **PhytoSmart** had the brand, customers, commercial expertise, and its own unique technology, science, and IP — but needed scaled production. Alone, neither could fully own this category. **Together, they are the only vertically integrated whole-cell omega-3 company with patented production technology, live products, & a path to institutional-scale supply.**

cellana™ + PHYTOSMART™

Merged – Complete Omega-3 Package to the Market | EPA + DHA

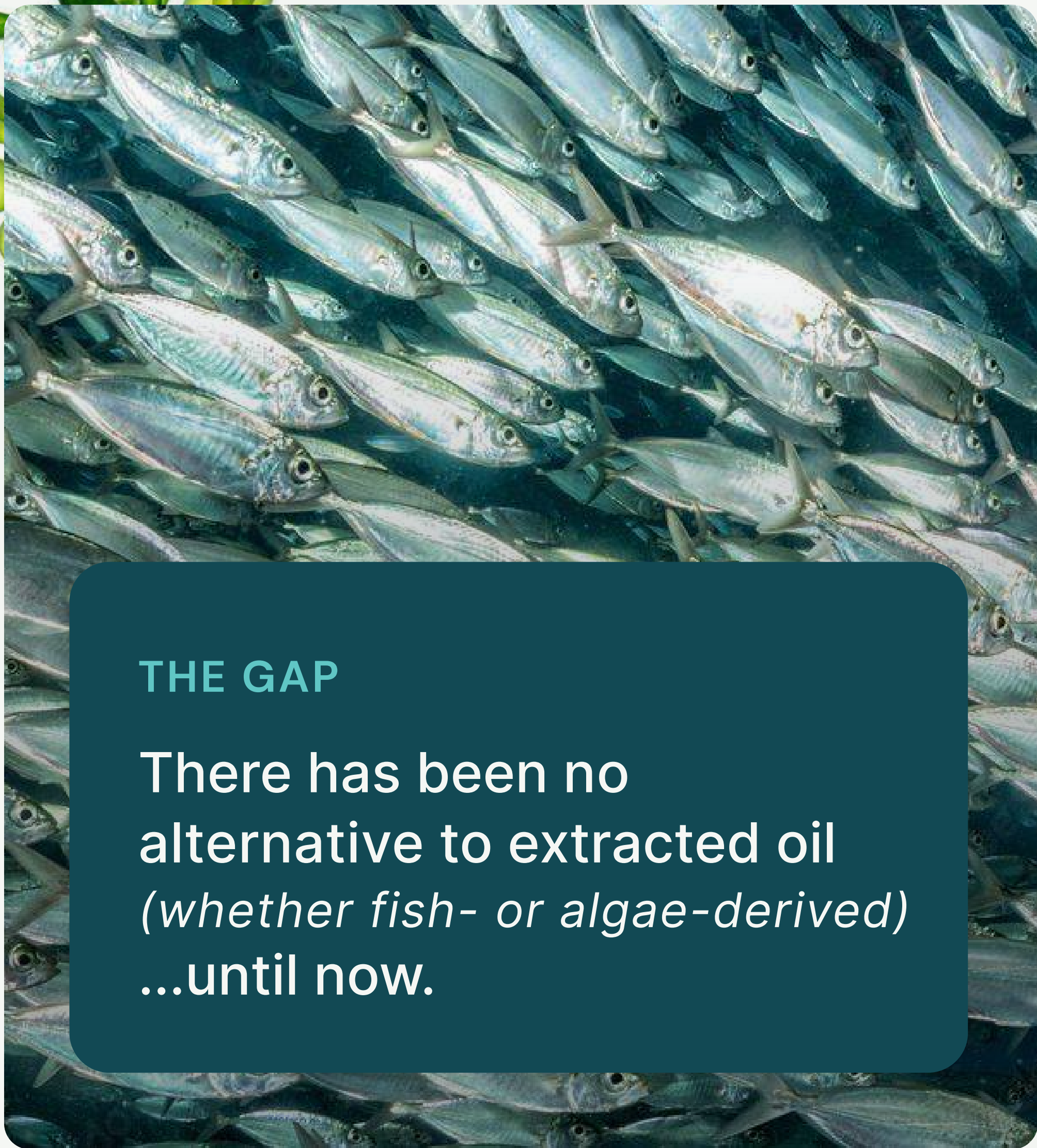
CELLANA

- ✓ High Capex | Low Opex
- ✓ Outdoor Production / Photosynthesis
- ✓ EPA-Producing Strains



PHYTOSMART

- ✓ Low Capex | High Opex
- ✓ Indoor Production / Fermentation
- ✓ DHA-Producing Strains



THE GAP

There has been no alternative to extracted oil (whether fish- or algae-derived) ...until now.

PROBLEM

The Omega-3 Market Is Broken & Unsustainable. It's Reliant On Fish.

- 👉 Fish-oil omega-3 is unsustainable and environmentally destructive — overfishing depletes marine ecosystems
- 👉 Fish oil carries contamination risks: microplastics, heavy metals, dioxins, and PCBs (industrial toxins)
- 👉 Extracted oils rapidly oxidize, turning rancid, losing potency, and becoming toxic
- 👉 All products currently on the market are either fish based, or limited to DHA only or not capable of Non-GMO Project certification



SOLUTION

Fish Don't Produce Omega-3s. They accumulate them by eating microalgae.

So we Cut Out the Middle-Fish.™

WHAT WE'VE BUILT

- ✓ A new, now complete category of omega-3 products using whole-cell marine microalgae — not extracted oils
- ✓ Whole-cell form retains the full set of nutrients: better absorption, longer shelf life, built-in antioxidant protection

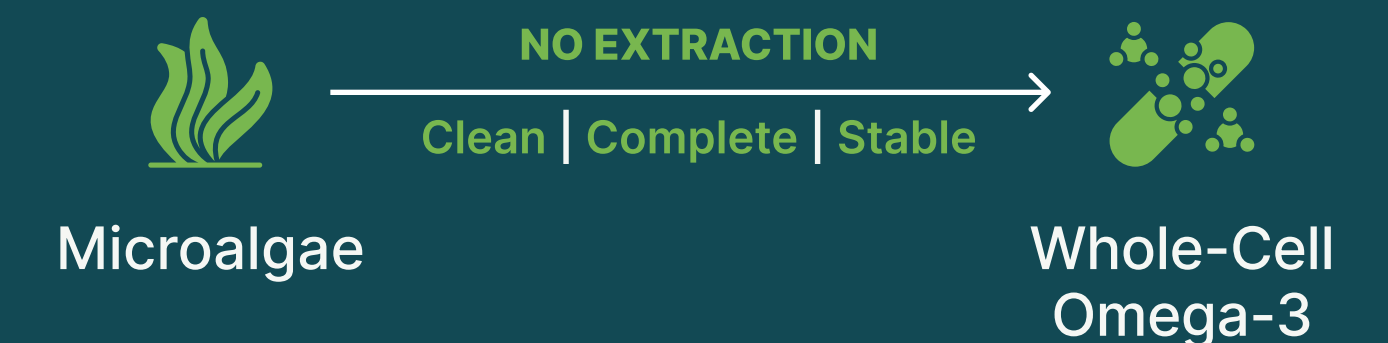
WHY IT'S BETTER

- ✓ No microplastics, heavy metals, dioxins, or PCBs
- ✓ Better absorption than extracted oils
- ✓ Additional proteins & energy value

TRADITIONAL APPROACH



OUR APPROACH



Whole-Cell. Minimally Processed.

Powered by Patented Technology
SPAGS™ – Sterile Plastic Algal Growth System
U.S. Patent #11,293,000

EDUCATION

The Category Shift: Why Whole-Cell Changes Everything

WHERE OMEGA-3 ACTUALLY COMES FROM

- ✓ Fish don't produce omega-3s — they accumulate them by eating microalgae. Microalgae is the original source. Fish are just the middlemen.

THE TWO OMEGA-3s THAT MATTER MOST: DHA & EPA

- ✓ The combination of DHA + EPA provides maximum anti-inflammatory protection in humans and animals.
- ✓ Flaxseed, chia, walnuts, and other land-based plants only contain ALA, a precursor that the body converts to DHA & EPA very inefficiently.

Most non-fish-oil omega-3 products deliver one or the other. A complete solution requires both — **which Cellana + PhytoSmart now deliver.**

DHA

DOCOSAHEXAENOIC ACID

Critical for brain development, cognitive function, eye, joint, skin, and anti-inflammatory health. The dominant omega-3 in brain tissue throughout life; before birth through old age.

DHA is a key part of pre-natal vitamins and (high-end) infant formula.

EPA

EICOSAPENTAENOIC ACID

Broad anti-inflammatory activity, cardiovascular protection, and triglyceride reduction.

The combination of DHA and EPA provides maximum anti-inflammatory protection in humans and animals.

EDUCATION

Extracted Oil vs. Whole-Cell — What's Actually Different

EXTRACTED OIL

Omega-3 products — including fish oil and algal oils — extract just the oil (~20% of the biomass). Fish oil's residual biomass is used as fishmeal; algal oil's residue is mainly discarded.

The extraction process often involves damaging high heat and chemical solvents that reduce the quality and bioavailability of the extracted oil and may make it susceptible to rapid oxidation / short shelf-life.

WHOLE-CELL

We skip extraction entirely.

The complete microalgae cells organism — with its DHA, EPA, Omega-3s, proteins, and natural cofactors all intact — are grown, dried gently, and delivered whole and unprocessed.

Think of it like eating the whole orange plucked from a tree versus taking a highly-processed vitamin C pill. Same source. Completely different product.

A NEW CATEGORY

Complete: Both DHA and EPA products.

Clean: non-GMO Project.org certifiable; grown in controlled indoor systems — no microplastics, heavy metals, dioxins, or PCBs.

Vegetarian: non-fish based; vegetarians no longer need to be deficient in DHA and EPA.

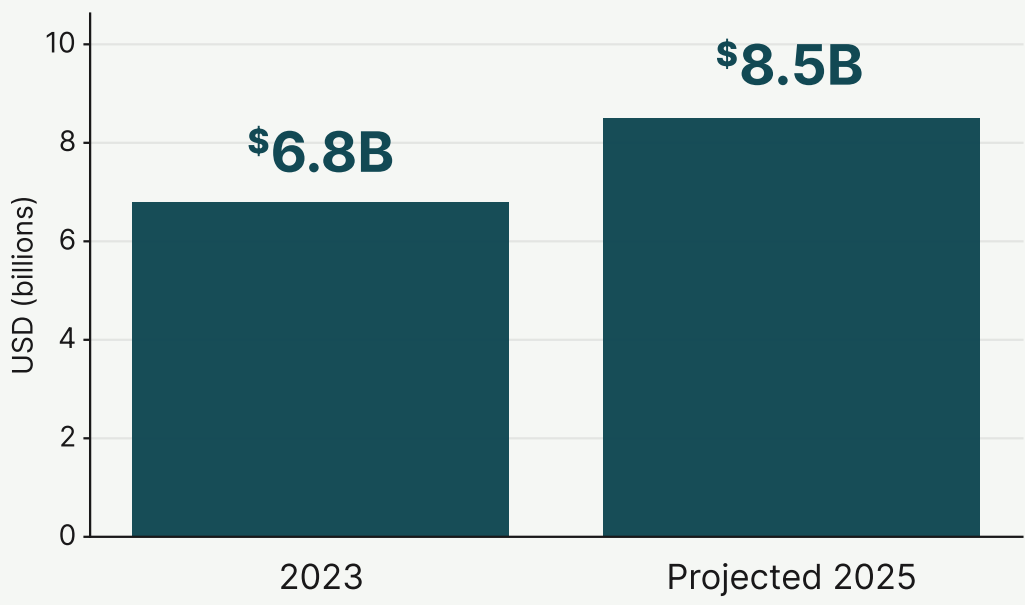
Versatile: the same biomass can serve supplements, functional food brands, and animal nutrition verticals with no change in production method or product specs.

MARKET OPPORTUNITY

Addressable Markets

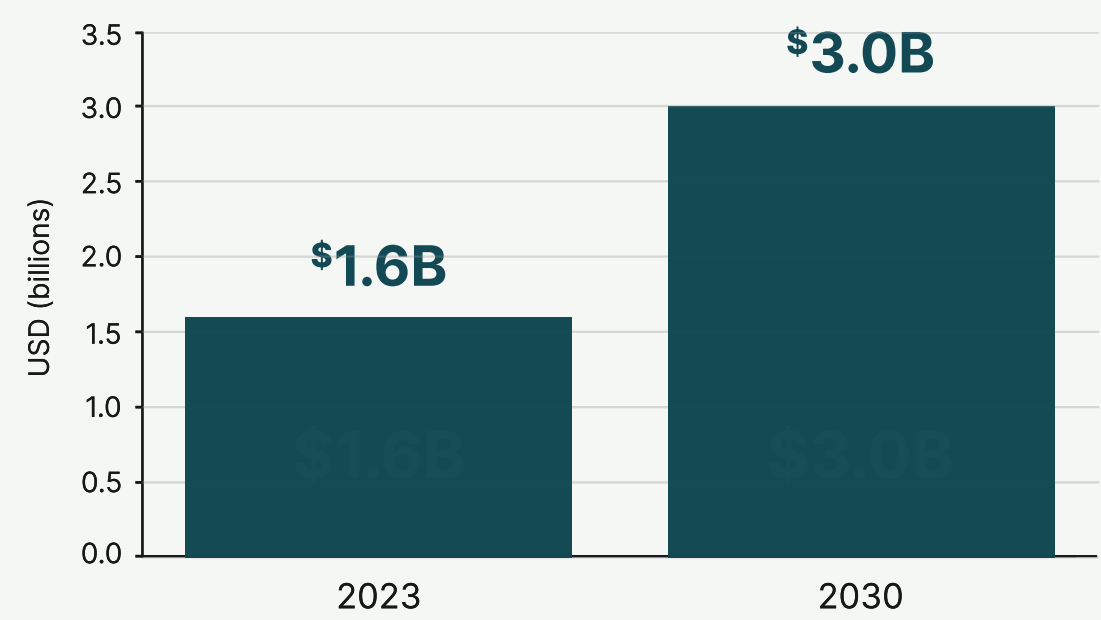
Omega-3 Supplements

US GROWING AT 8-9% CAGR



Vegan/Algae Omega-3

GLOBAL GROWING AT 9.2% CAGR

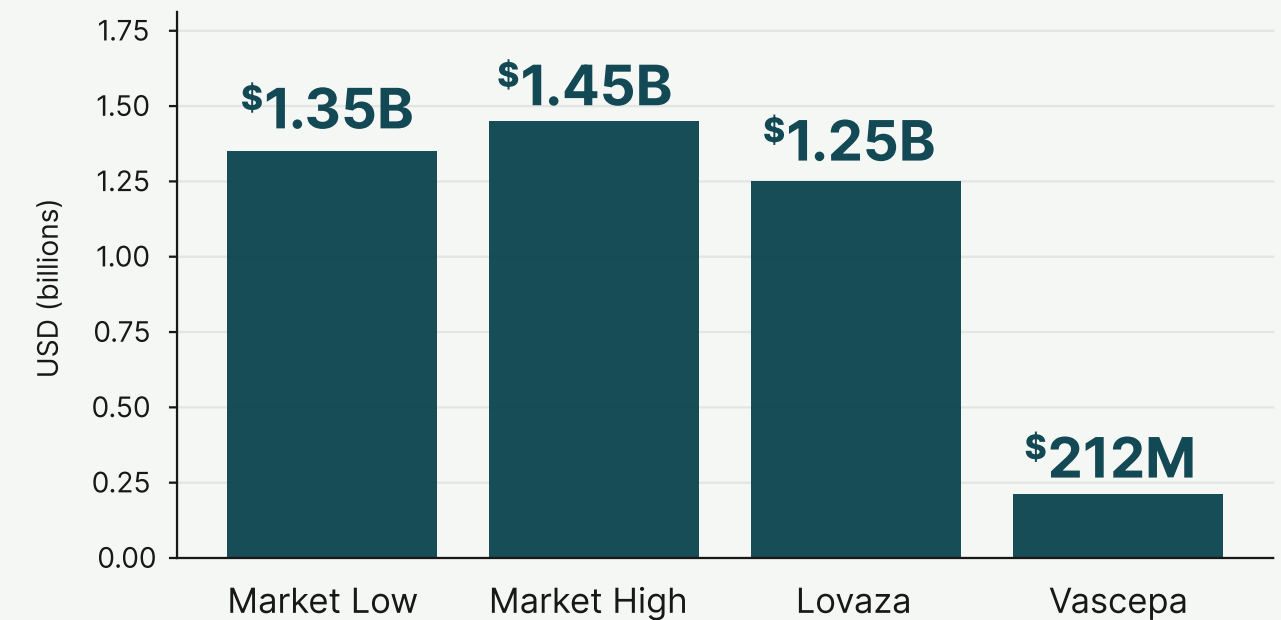


MegaTrends Driving Demand

- Pets as family:** surge in pet wellness spending (food, pharma, health insurance, mental health)
- Desire for healthy living,** longevity, high-protein, clean-label, and sustainable products

Prescription Omega-3 Pharma

GLOBAL 2024



01

TODAY

Premium Pet Supplements
(high-margin, direct-to-consumer, fast feedback loop, plus emerging retailer, B2B, and distributor relationships)

02

NEAR-TERM

Human Supplements, Functional Food and Beverage Ingredients
(B2B, recurring, scalable volume)

03

LONG-TERM

Ag-Scale Protein Ingredients, Animal Feed, Pharma, and Biocrude/Biofuel Co-Products

COMMERCIAL ROADMAP

Product Commercialization Timeline At A Glance



- 🌿 Human Supplements (whole algae)
- 🐾 Pet Supplements (whole algae)



- 🌿 Human Supplements (whole algae)
- 🐾 Pet Supplements (whole algae)
- 🍴 Food & Feed Ingredients (extracted biomass)
- 💧 Crude Oil (extracted oil)
- 💊 Human Supplements / Pharmaceuticals (extracted oil)

TODAY

COMMERCIAL PRODUCTS

DHA + EPA Omega-3 Toppers for Pets

2027 AND BEYOND

COMMERCIAL PRODUCTS

DHA + EPA Omega-3 Toppers for Pets + Additional SKUs

DHA + EPA Omega-3 Ingredients for Human Food

DHA + EPA Omega-3 Supplements for Humans

High-Protein Algae Meal for Food/Feed Ingredients

“Liquid Gold” Pharmaceutical Ingredients for Humans

Residual Crude Algal Oil for Fuels and Chemicals

BUSINESS MODEL

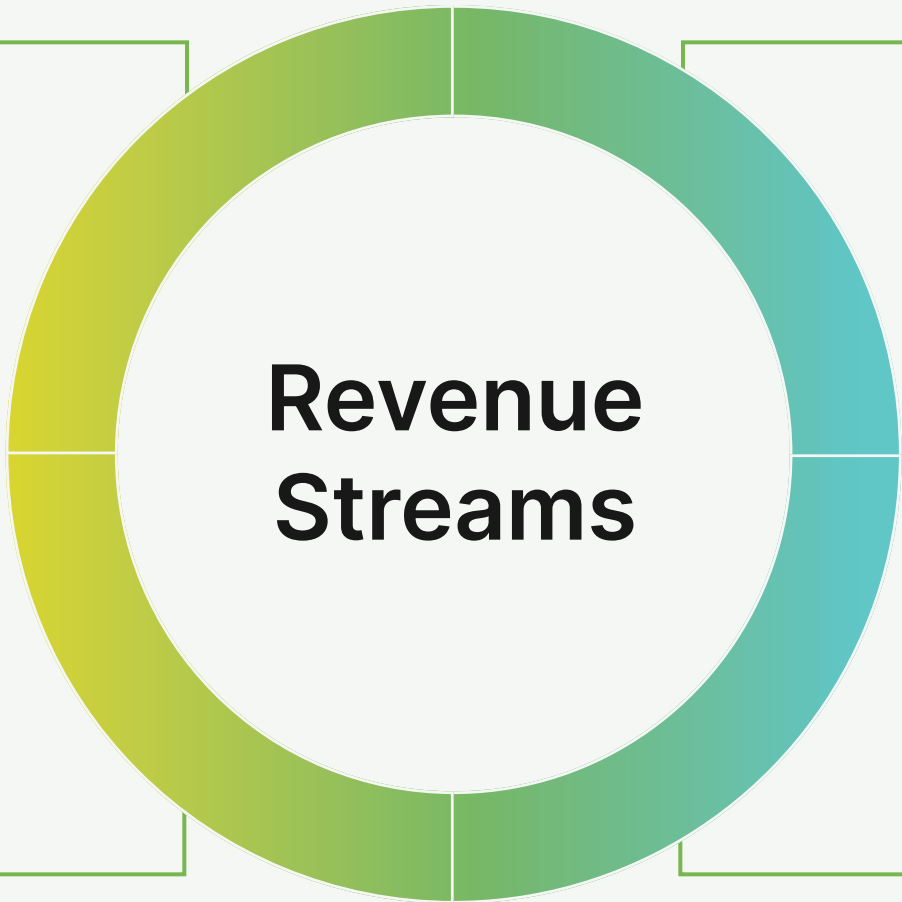
Vertically Integrated. High Margin.
Multiple Revenue Streams.

B2C (Consumer Brand)

Pet supplements via Amazon, own website, retail
 Human supplements (Year 2, on GRAS approval)
 High margins; rapid product iteration

Licensing

License SPAGS™ technology to partners across industries and types of microorganisms
 License ingredient IP to CPG and pharma brands



B2B (Ingredient Supply)

Supply whole-cell algae ingredients to food brands
 LOI signed with first food customer
 (>\$1MM/yr min.)
 Pharma, agri, and aquatic feed ingredient markets

Long-Term: Biorefinery Scale

Multi-product biorefinery
 (meal + high-value oils + biofuel)
 Profit at every scale stage

COMPETITIVE MOAT

- Own the brand AND the manufacturing IP — full value chain control
- Patented production process and proprietary know-how (U.S. Patents #11,293,000 & 7,770,322) are defensible and hard to replicate

GO-TO-MARKET STRATEGY

Pets First. Then Humans. Then Agriculture.
Then the Moon and Mars. For Real.*



Phase 1 — Pet Market

Accelerate e-commerce via Amazon and PhytoSmart.com
Fully-fund pet market marketing campaign: Q2 2026
Expand into independent and specialty pet retailers (NorthEast/MidAtlantic expansion underway; national rollout planned)
Activate B2B sales channels for ingredient supply to pet food brands

Phase 2 — Human Market

On GRAS Approval from FDA
B2C: Cross-sell to existing pet customer base for human supplement launch
B2B: Functional food ingredient supply (LOI already signed)
Target: supplement retailers, natural/whole/raw food brands, and pharmacy channels

Phase 3 — Ag-Scale

Large-scale production expansion for food/feed, pharma, and biofuel markets
Partnership model: multiple partners including Thai Union (already engaged)
Spot market and long-term supply agreements

**(See Andy Weir's Artemis and The Martian)*

COMPETITIVE ANALYSIS

PhytoSmart Omega-3 Checks All the Boxes.
No Competitor Does.

										
Whole Biomass	✓	X	X	X	X	X	X	X	X	X
Vegan	✓	X	X	X	X	X	✓	X	X	✓
Complete Omega-3	✓	✓	✓	X	X	X	✓	✓	✓	✓
Non-GMO	✓	✓	✓	✓	✓	✓	X	✓	X	X
More Sustainable	✓	X	X	X	X	X	✓	X	X	✓

TEAM

Experienced Operators. Deep Domain Expertise.



Martin Sabarsky, JD, MBA
CEO, CELLANA

25+ years cleantech executive, lawyer & investment banker
Oversaw \$30MM of Cellana funding (2011–2018)



Deena Sisitsky, MBA
PRESIDENT OF CONSUMER PRODUCTS;
CO-FOUNDER OF PHYTOSMART

25+ years senior executive in pharma and pet supplements
Formerly: Abbott Laboratories, LyphoMed-Fujisawa USA



Tazz Latifi
CMO

Founder & President, Pet Industry Resource
Former VP of Sales, Shorewood Packaging



Hiro Hara
HEAD OF INNOVATION;
CO-FOUNDER OF PHYTOSMART

30+ years technology transfer between US and Asian markets
Developed PhytoSmart's patented SPAGS™ growing system



Patrick Cregten
OPERATIONS DIRECTOR

10+ years aquaculture and algae production
Formerly: Australis Aquaculture & Greenview Aqua-farm



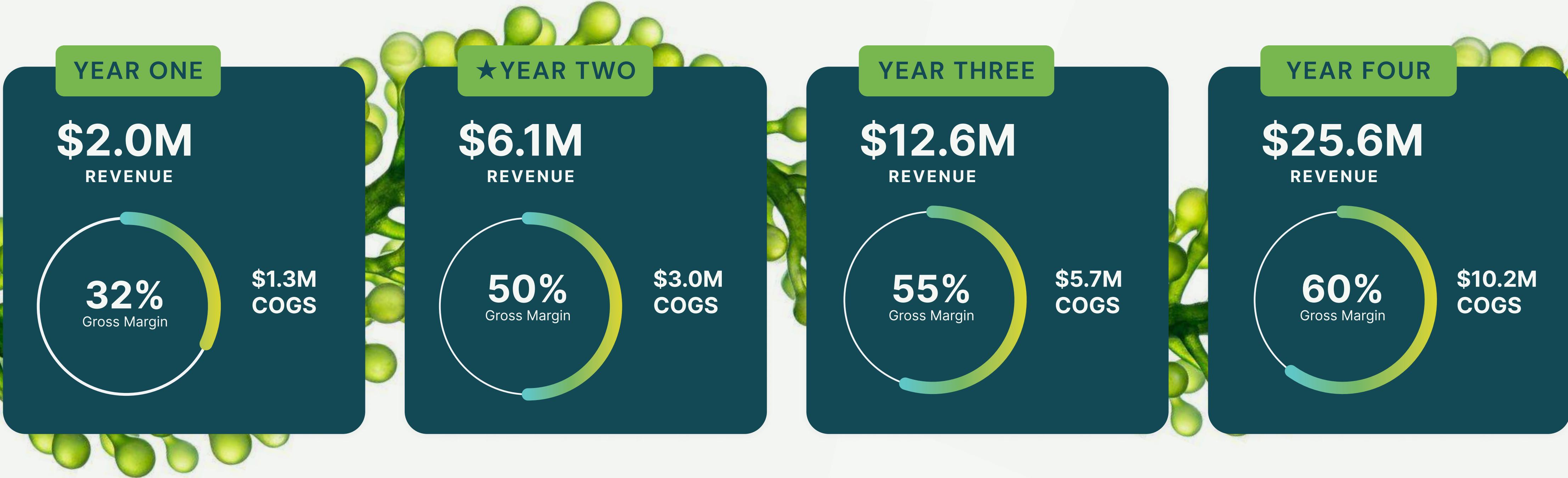
Larry Dressler
OPERATIONS CONSULTANT

25+ years: algae, edible oil, oilseed sectors
Founder/CEO: Agcore Foods, Edible Food Group, Tomorrow BioFuels

FINANCIAL PROJECTIONS

Profitability Forecast by Year 2

135% CAGR. Margins scaling from 32% → 60%.



*Profitability projected in Year 2. *Excludes \$2.6MM projected grant revenues over forecast period and large-scale fractionated products in Years 3-4

THE ASK

\$6M Convertible Note to Accelerate to Profitability & Set the Stage for a Liquidity Event (IPO/M&A)



- Sales & Marketing — 12.8%
\$925K
- Product-Related R&D — 12.5%
\$900K
- Expanded Production Facility Capex — 6.2%
\$450K
- Additional SG&A — 29.2%
\$2.1M
- Working Capital/General Corp. — 28.8%
\$2.08M
- GRAS Application (Human Use) — 10.4%
\$750K

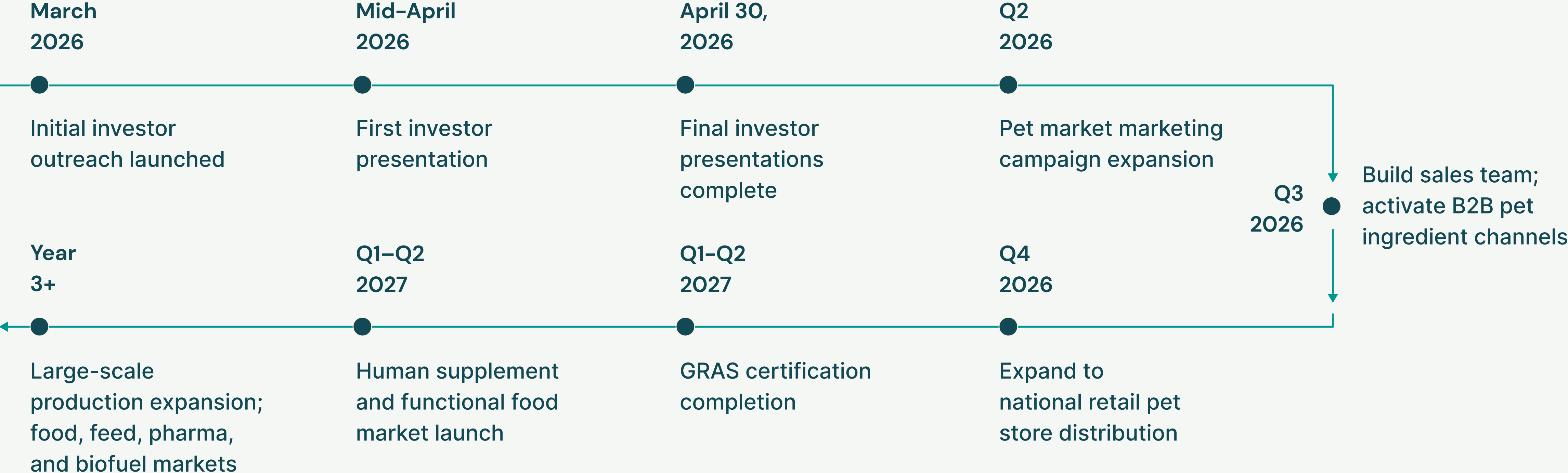
OFFERING TERMS

<p style="color: #76b82a; font-weight: bold;">Amount</p> <p style="font-size: 2em; font-weight: bold; color: white;">\$6M</p>	<p style="color: #76b82a; font-weight: bold;">Interest Rate</p> <p style="font-size: 2em; font-weight: bold; color: white;">8%</p> <p style="color: white; font-weight: bold;">ACCRUED</p>
<p style="color: #76b82a; font-weight: bold;">Conversion Discount</p> <p style="font-size: 2em; font-weight: bold; color: white;">15%</p>	<p style="color: #76b82a; font-weight: bold;">Converts Into</p> <p style="font-weight: bold; color: white;">Future Series Preferred Stock OR IPO IF SOONER</p>

*Includes \$1.2M of gross margin from product sales and grant revenue in Years 1-2

MILESTONES & ROADMAP

Clear Path from Investment to Profitability



THANK YOU

"You're not just investing in a supplement. You're investing in the future of functional, sustainable nutrition."

— Deena Sisitsky, CEO of PhytoSmart

Join us in building the future of pure, purposeful nutrition. We invite you to participate in our \$6M convertible note offering and help accelerate the new generation of omega-3s to market.

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The background of the slide is an underwater scene. The top half shows the surface of the water with gentle ripples. Below the surface, the water is a deep, clear blue. In the lower half, a diverse coral reef is visible, with various types of coral and sea fans. The lighting is soft and diffused, typical of an underwater environment.

Appendix

Known Risks & Active Mitigation

Consumer adoption

“Whole-cell algae” is a new concept; most consumers are trained on fish oil capsules

Mitigation: Products selling with repeat purchasers; 2024 Pet Healthcare Innovation Award confirms product-market fit

Absorption validation

Whole-cell absorption advantages are well-reasoned but not yet backed by large-scale human clinical trials vs. oils

Mitigation: Feed trial data compelling (up to 60x omega-3 uplift in broilers); human clinical validation funded by this raise

Production scale and cost

Algae has historically failed on unit economics; scaling without a high-value anchor product is the industry's graveyard

Mitigation: \$90MM+ de-risks production; patented ALDUO™ system validated across 5 states over 15 years

Competitive response

Established algal oil incumbents (DSM-Firmenich, Corbion) could move into whole-cell if the category proves out

Mitigation: 15-year head start, two issued patents; incumbents are structured to extract, not to skip extraction

GRAS approval timeline

The human supplement/food ingredient B2B channel requires FDA GRAS designation; timeline carries regulatory uncertainty

Mitigation: Clean safety record from existing pet use of the same all-natural, non-GMO algae strains; B2B LOI signed

Platform execution

The multi-vertical vision (supplements → food → feed → fuels) is capital-intensive and long-dated beyond the near-term horizon

Mitigation: Raise focused on supplements and food ingredients only; downstream verticals are optionality, not dependency

WHAT WE'VE PROVEN

The Market is Looking For PhytoSmart

Commercial Demand

Launched in the pet space with repeat buyers and growing interest from independent and specialty retailers. Consumer awareness and demand for human product(s) already exists from current pet parent customers.

Premium Positioning

We've created a trusted, elevated brand that aligns with wellness, science, and sustainability.

Validated Production

Scalable, cost-effective manufacturing of whole-cell algae in multiple formats.



PRODUCT & COMMERCIAL DETAIL


Established Products from Cellana & PhytoSmart Algae Strains

PHYTOSMART™

SMALL & MEDIUM SCALE

100% WHOLE ALGAE

PREMIUM OMEGA-3




PRODUCT TYPES

Pet Supplements
\$\$\$

Human Supplements
\$\$\$

MARKET ENTRY & CHANNEL HIGHLIGHTS

<p>B2C - 1st Stage</p> <p> PHYTOSMART.COM</p>	<p>B2B - 2nd Stage</p> <p>Q4 2025 Launch Retail Stores in NYC</p>
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cellana

INDUSTRIAL SCALE

80% MEAL

20% OIL



PRODUCT TYPES

DHA + EPA Omega-3 Supplements \$\$\$

Food & Feed \$\$

Fuel & Chemicals \$

MARKET ENTRY & CHANNEL HIGHLIGHTS

Multiple Partners including 



DATA SOURCES

References & Citations

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