

Technical Brief: Summary

Offshore Sargassum Interception & Bioactive Conversion Platform

The Insight

Pelagic sargassum is not a problem to be managed. It is the most bioactive complex marine biomass on Earth.

The world is spending **\$6 billion annually** trying to remove it.

NeuroSync converts it into **high-value biological, medical, and carbon outputs**.

The System — Bio-Farm™

A **patented offshore interception platform** that:

- Intercepts sargassum **before it reaches shore**
- Maintains it as a **living biological system**
- Converts it into **10 simultaneous product streams**
- Operates under a **community co-ownership model**

Not cleanup.

Biological resource infrastructure.

Processing Advantage — The IP Moat

Industry standard: thermal drying

→ destroys high-value compounds

NeuroSync approach: cold-process extraction

→ preserves full bioactive profile + holobiont

Result:

- Access to **pharmaceutical-grade outputs**
- Unlocks **highest-value product streams**
- Creates a **categorically different material class**

10 Output Streams (Single Feedstock)

Bioactive / Pharmaceutical

- Fucoidan (pharmaceutical-grade)
- Alginate
- MRSA-active antimicrobial

Agriculture / Industry

- Premium animal feed
- Biofertilizer
- Biochar

Energy / Resource

- Bio-oil
- Freshwater

Environmental

- Triple-stack carbon credits

RAPIDHealth™ Platform

Cold-processed compounds power a **next-generation medical pipeline**:

- Combat wound care systems
- Bone regeneration scaffolds
- Neural repair formulations
- Oncology candidates

Dependent on **holobiont preservation**—destroyed by all competing methods.

IP & Validation

- **12 UK patents filed**
- **BIO-PRESERVE™** registered trademark
- Academic partner: **University of York (CNAP)**
- EU pilot submissions: **Guadeloupe, French Guiana**
- Government engagement: **12 territories | 4 continents**

Deployment Model

- Bio-Farm™ assets **co-owned by local fishing cooperatives**
- Aligns:
 - Economic incentives
 - Environmental outcomes
 - Long-term system sustainability

What This Enables

- Converts a **\$6B global cost center** into a **multi-revenue system**
- Unlocks **new pharmaceutical pathways**
- Creates **carbon-negative infrastructure**
- Establishes a **new category in the blue economy**

Core Domains

Marine Biotechnology | Regenerative Medicine | Medical Devices

Circular Economy | Carbon Sequestration | Ocean Conservation

Bottom Line

NeuroSync is not solving a waste problem. It is deploying a new class of biological infrastructure.

The complete Technical Brief may be provided on request.