

MANATEE

biomaterials

Seaweed in the Construction Industry

A practical case on seaweed based ceiling panels

June 2026

Leading Ocean-Derived Biomaterials Into Everyday Applications

Manatee Biomaterials is at the forefront of transforming ocean biomass into valuable material ingredients for the product and packaging industries.



Manatee works closely across the entire value chain, accelerating seaweed from farming to application

01

Seaweed Farmers

Strategic Sourcing

We partner with farmers to secure high-volume, biomaterial yields. By selecting species that benefit the local marine ecosystem, we ensure a stable and sustainable supply chain tailored to technical requirements.

02

Manatee

Tailoring & Refining

Operating with a "food-first" priority, we refine bulk and custom formulas. We process seaweed in bulk as well as tailoring its properties to meet the specific performance needs of product and packaging application.

03

Converter & Brand

Co-Development

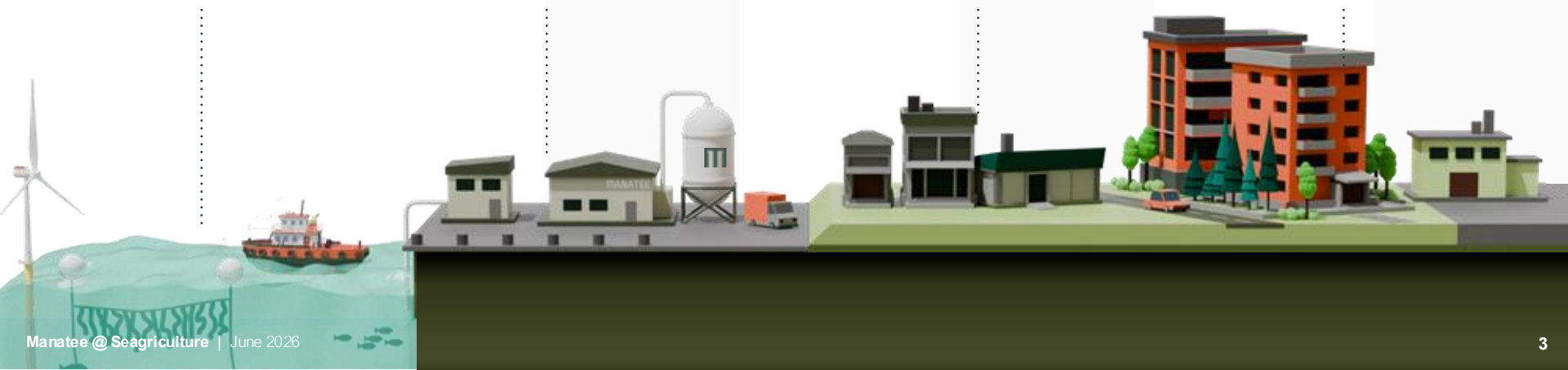
With our network we act as a close partner for product development. From rapid prototyping and market-fit analysis to final design, we co-develop seaweed-based solutions that are ready for commercial scale.

04

Consumer and EoL

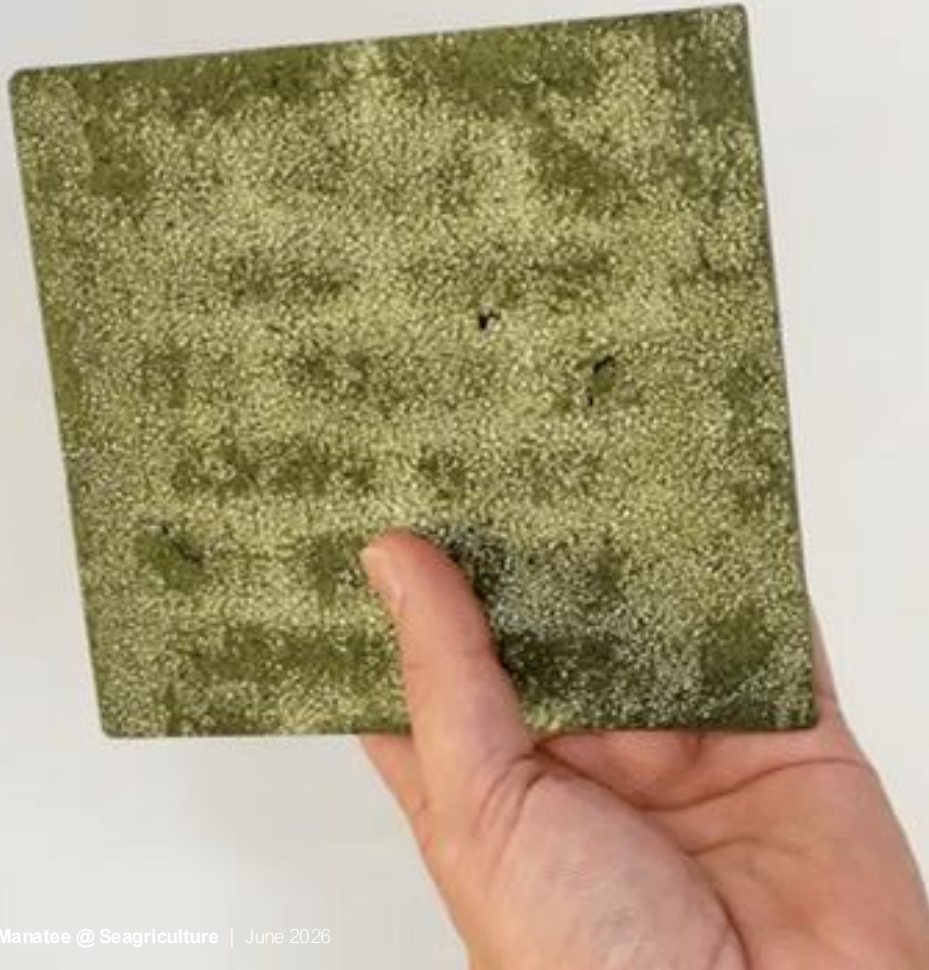
Full-Cycle Integrity

We provide the data and transparency needed to build consumer trust. By offering end-to-end traceability, we simplify waste management integration and ensure product's end-of-life.



**Next generation
construction materials can
be made from seaweed.**





Resin free, incredibly durable, and re-moldable at end of life.

We work from raw material to product

01

Source

Sugar kelp from responsibly managed farms



02

Harvest

Non food competing harvest



03

Refinement

Transforming to functional material grades



04

Manufacturing

Either circular or flat shaped objects



05

Product design

Designed for long life into panels & tubes



**Utilizing seaweed in
applications where it makes
sense.**

Ex. Self-Extinguishing

Imagine seaweed alternatives to timber, metal, and fiberglass in our built environment, one component at a time.

CO2 sequestered, 20x faster than timber

Compared to timber, seaweed absorbs carbon quickly in a season, locking it in buildings for +30 years.

Lean processing, from farm to refinery to production

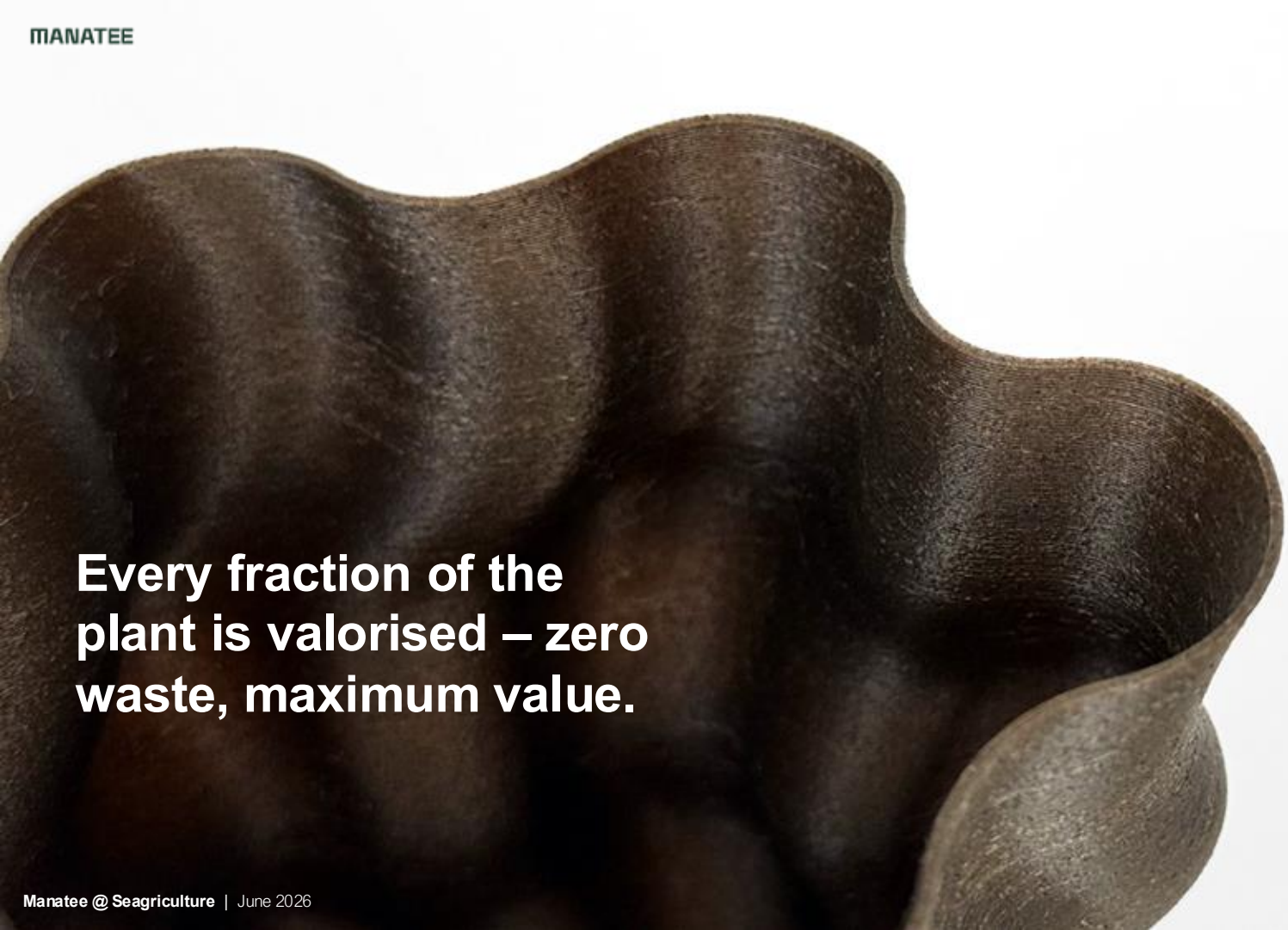
Processed with low energy, chemical & fresh water usage from farm to refinery to production of the construction material.

Biobased & resin free, recyclable & biodegradable

Production uses no binders. At end of functional life it can be remade into new components or put out to pasture.

Supporting blue communities, with local farming & refining

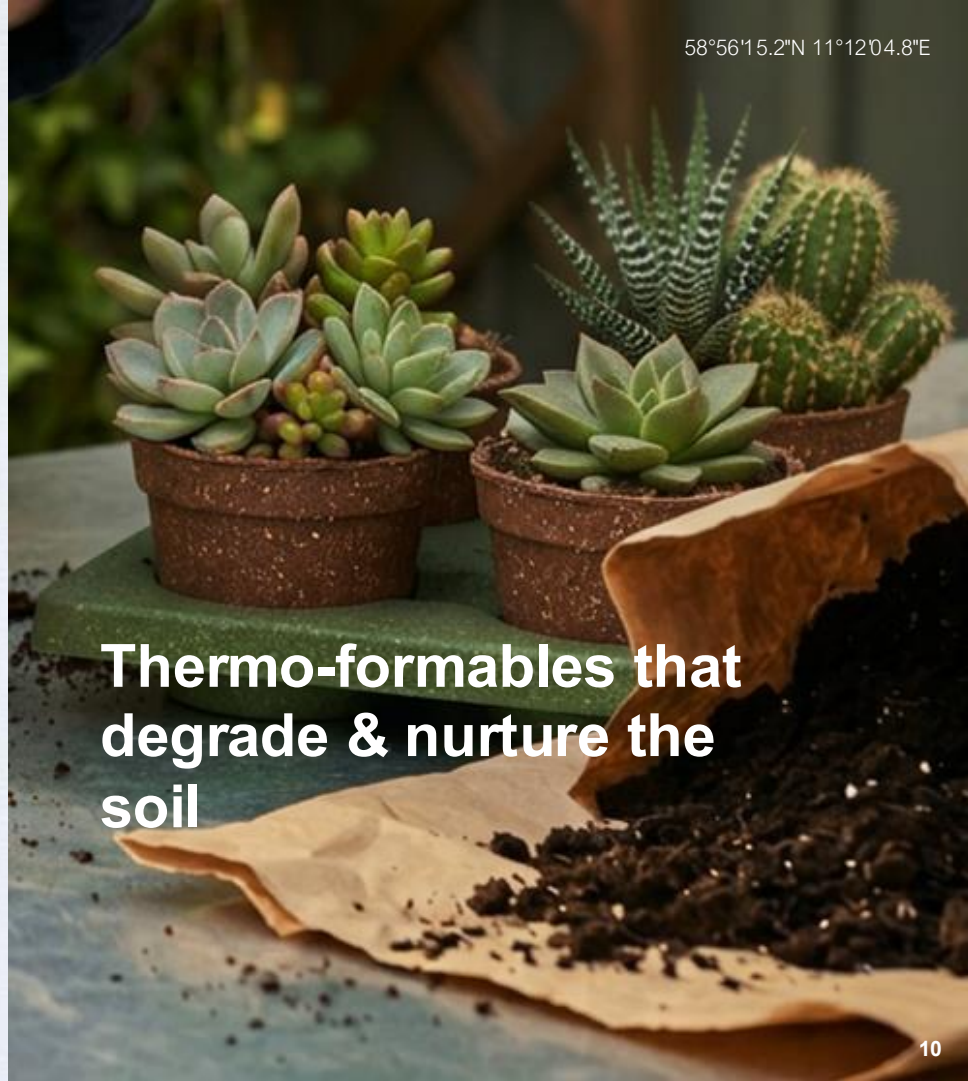
Coastal communities can grow from seaweed as an added income to an industry in its own right. Construction materials made locally.



**Every fraction of the
plant is valorised – zero
waste, maximum value.**



**Thermo-formables that
degrade & nurture the
soil**



**Coatings made thinner
without losing performance**

Alginate yarn developed for functional textiles

We are just getting started...

We are inviting innovation partners who have a need for new applications:



Brands

seeking sustainable interior materials or packaging



Agricultural companies

interested in ocean-derived soil amendments



Textile manufacturers

who want to explore bio-based textiles and dyes



Researchers & startups

developing novel material applications

Our Three Beliefs

01

Seaweed can compete

We believe that seaweed can be a competitive & desirable source for products and packaging – matching or exceeding the performance of conventional materials.

02

Transparency builds trust

We believe that we need a transparent and reliable value chain is essential – from ocean to end product, every step traceable and verifiable.

03

Build it right from the start

We believe the opportunity is now. Learning from industries like forestry, we can build the seaweed industry circular from day one – not retrofit sustainability later.

Thank you!