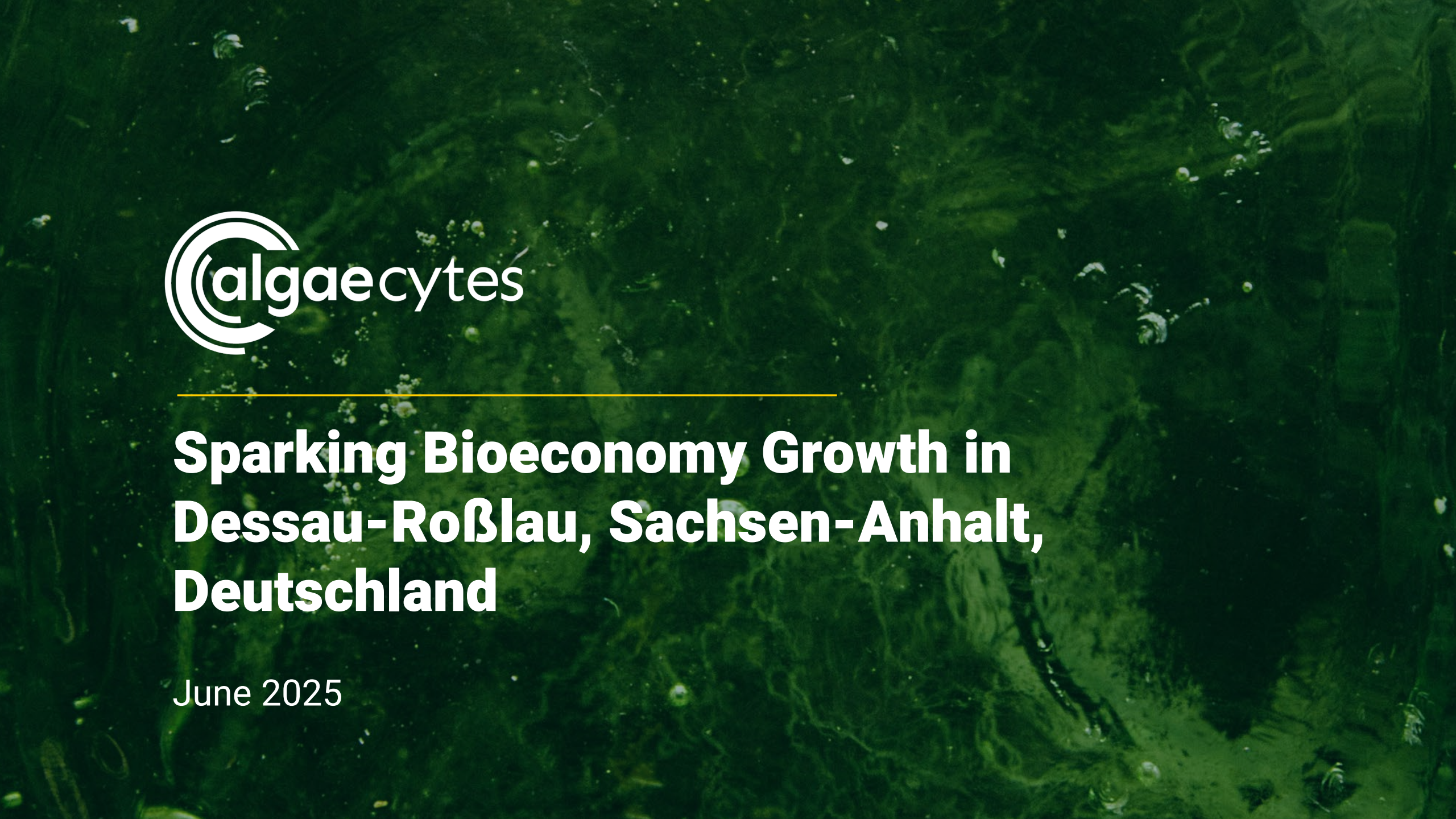


algaecytes

Sparking Bioeconomy Growth in Dessau-Roßlau, Sachsen-Anhalt, Deutschland

June 2025

Introduction

AlgaeCytes: Who We Are; What We Do; Immediate Plans

Bioeconomy: Breaking It Down to 3 Essential Parts

Bioeconomy

“Bio – econo – my”

Maintaining and Improving the Biosphere: AlgaeCytes & Microalgae

Demand for fish for protein is increasing but even now there are not enough fish in the sea!

Fish supply shortfall

» In 2022 the Food and Agriculture Organization estimated that 94.7% of Global fishing stocks were overfished or at the sustainable limit; only 5.3% of stocks could support increased fishing.

» Climate change ➡ temperatures ⬆ and fish productivity ⬇

» Hydrocarbon, microplastic and heavy metals pollution creates more problems

» Demand for fish to nearly double between 2015 and 2050, from 80m tonnes to almost 155m tonnes per year

» Only 15% of all fish oil produced is available for human consumption because most fish feeds aquaculture


OSCAR
THE RESCUE FISH

Maintaining and Improving the Biosphere: AlgaeCytes & Microalgae

A Vegan, non-Fishy Alternative

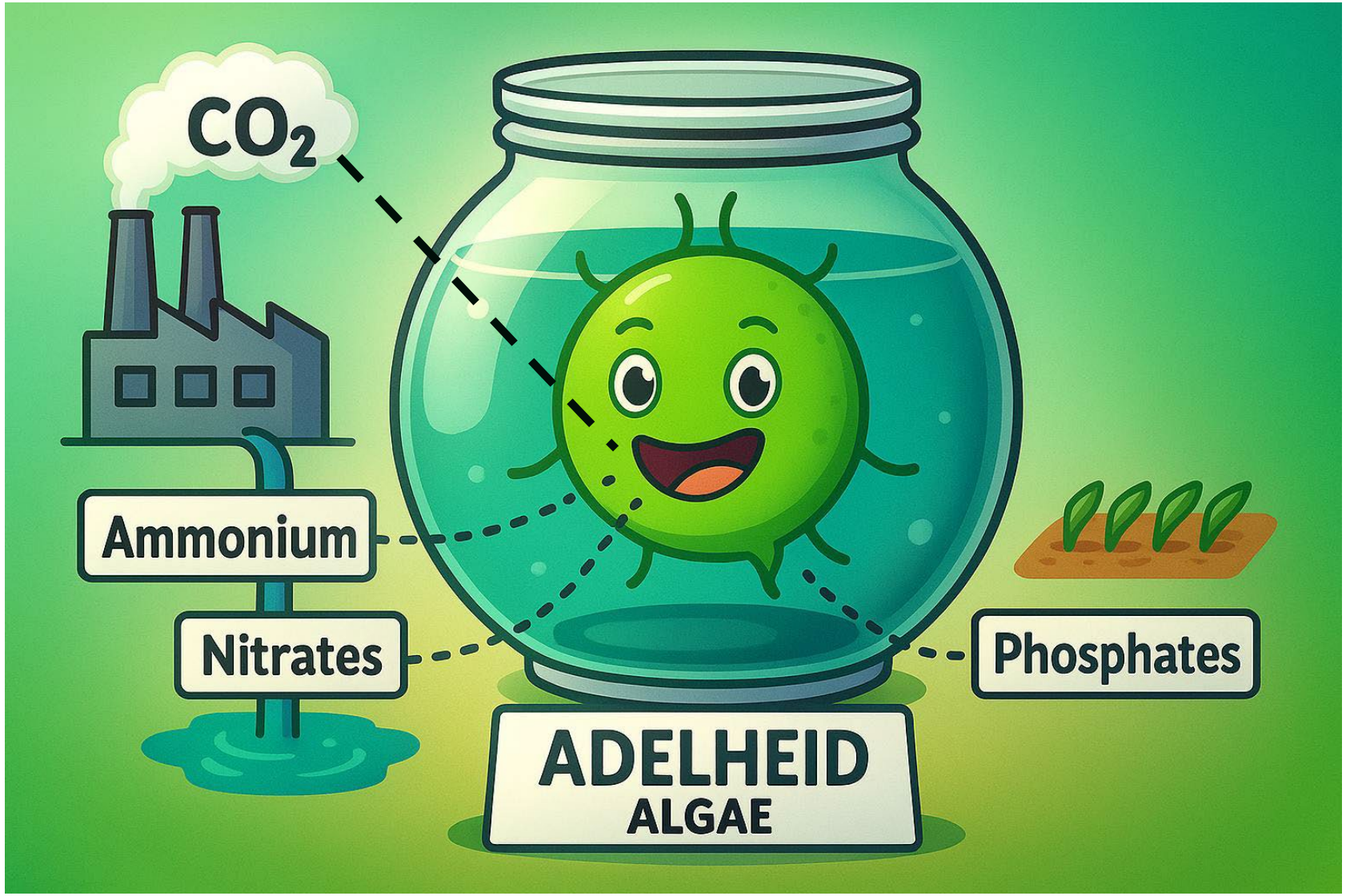
- Go to the Source for Omega-3!
- Fish don't make Omega-3 themselves; they get it by eating algae or something that has eaten algae
- Algae are vegan-friendly, satisfying increasing demand for vegan alternatives to fish products, **and** demand by those who don't like a fishy aftertaste or odor

Save Protein for Humans!

- Microalgae will save fish protein for Human food
- Experts estimate that on average it will take 11,373 tonnes of fish to produce as much Omega-3 EPA as 4 AlgaeCytes Manufacturing Plants will produce from microalgae in Dessau
- That's estimated to be enough fish to feed Frankfurt am Main on average for a year

Maintaining and Improving the Biosphere: AlgaeCytes & Microalgae

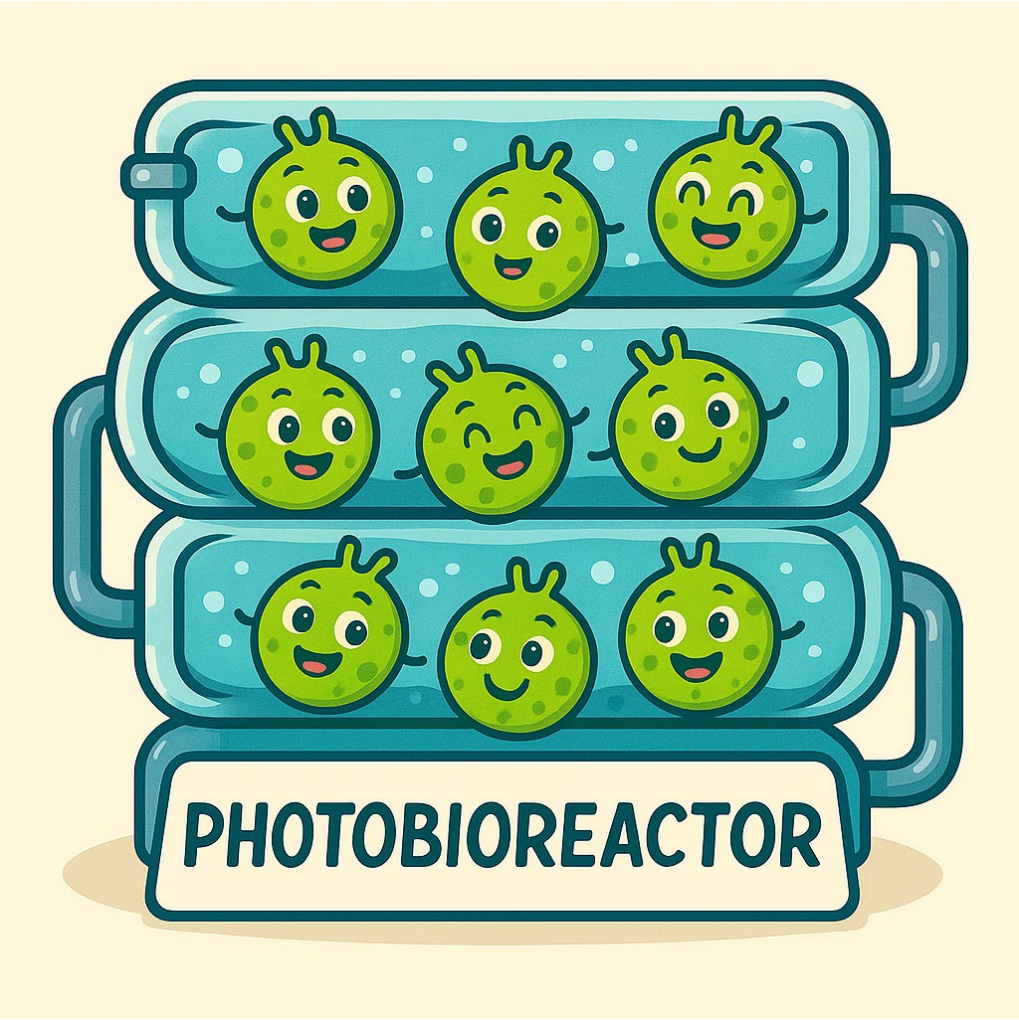
Adelheid is not just a pretty face --- Microalgae naturally sequesters CO_2 and process waste items

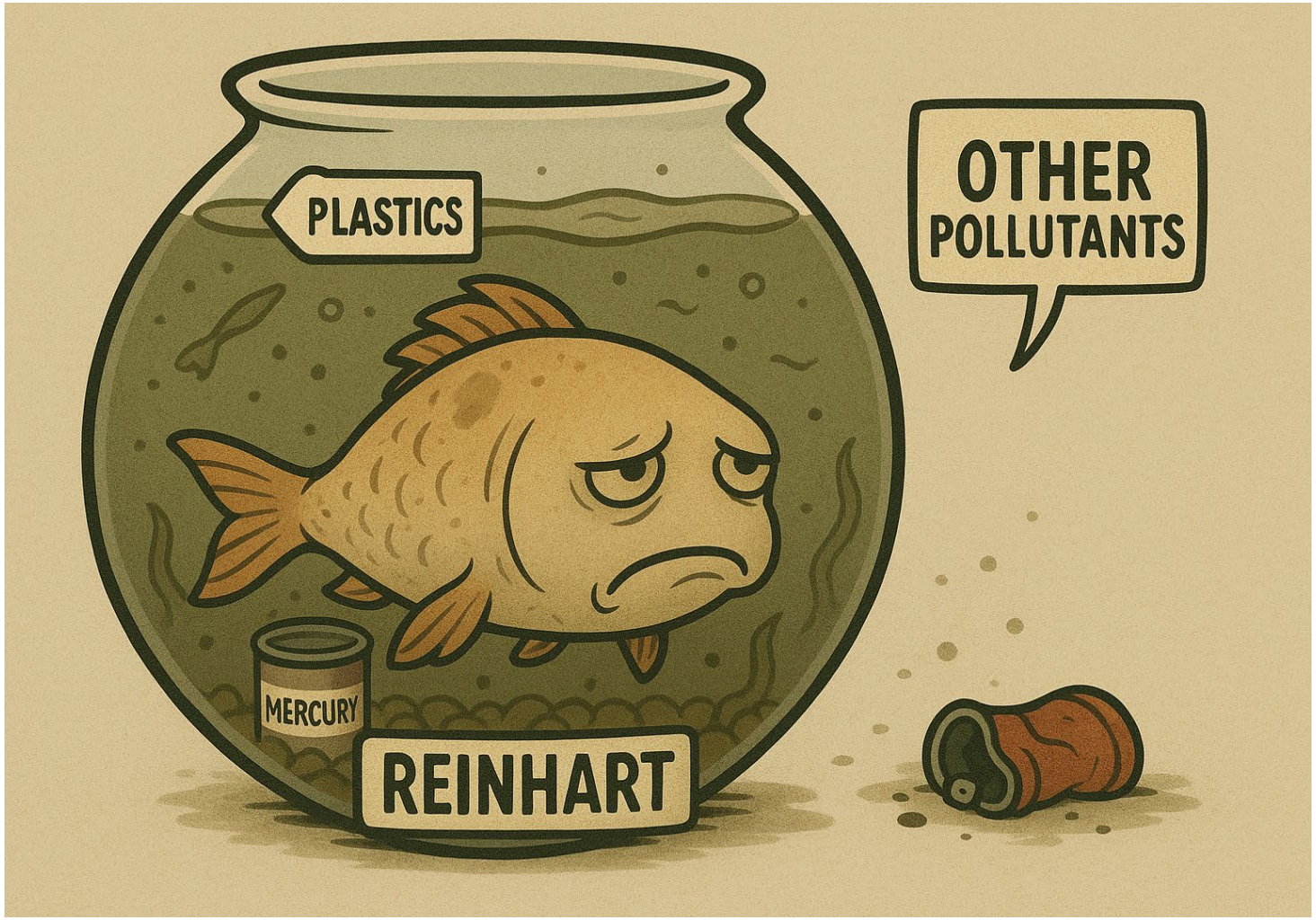


- Microalgae ingest as nutrients what otherwise requires treatment as waste
- Each AlgaeCytes Plant will sequester at least 850,000 kg of CO_2 per annum
- Substantial additional CO_2 sequestration savings if corresponding amount of fish for Omega-3 not fished, processed and transported

Maintaining and Improving the Biosphere: AlgaeCytes & Microalgae

Enclosed photobioreactors minimize environmental contamination and climate/weather effects, and ensure consistency and traceability





Maintaining and Improving the Biosphere: AlgaeCytes & Microalgae

A Highly Circular Process

- We recycle water
- We recycle process materials
- We use the algal biomass remaining after extraction of Omega-3 EPA as a natural agricultural crop biostimulant.
- That product is a natural source of micro and macro nutrients AND acts as a biostimulant application to multiple crops, showing a 13% to 37% yield increase in selected high value crops on which it has been trialed to date.
- There is a demand for natural agricultural crop biostimulants both because of the growing market for natural products and the desire to reduce environmental damage from run-off of chemically synthesized fertilizers.

Remember the 3 Essential Parts of the Word “Bioeconomy”

Bioeconomy

“Bio – econo – my”

Success in the Bioeconomy: AlgaeCytes & Microalgae

Success in the Bioeconomy: AlgaeCytes & Microalgae

- EU Mandates and German legislation aim to phase out fossil fuels to reach net-zero greenhouse gas emissions.
- Among other things, implementation in Germany requires significant increase in the share of renewable energy for heating, as follows:

Measure	Deadline
Cities ≥100k heat-planning deadline	June 30, 2026
Smaller municipalities heat plans	June 30, 2028
New heating systems ≥65% renewables	From Jan 1, 2024
Renewable share in district heating	New networks from 2024
Existing network targets: 30% by 2030, 80% by 2040, 100% by 2045	

- Very expensive for municipalities and for heating customers to meet these requirements; impossible for some

Instead:

- AlgaeCytes Dessau Plant 1 will recapture most of its LED lighting energy and transfer it to Dessau for heating
- With Dessau Plant 1, Dessau will meet the requirement for renewable energy heating at low cost—cheaper than gas heating.
- With our additional Dessau Plants, Dessau will satisfy 100% of its heating with renewable energy at low cost

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