Easy Environmental Solutions (EES)

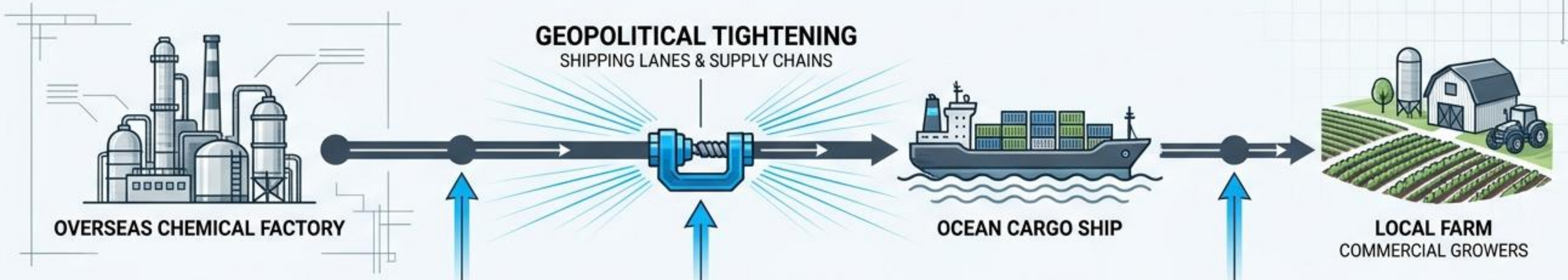
The Next Global Race: Fertilizer Independence

Decentralized, biology-led infrastructure for resilient agriculture and national food security.

Transforming Waste into Worth | Clean Food, Water, & Energy

The Future of Fertilizer Won't Be Imported

Agriculture is entering a new era. Countries and large commercial growers are increasingly dependent on imported synthetic fertilizer systems they do not control.



Reliance on Foreign Imports

Geopolitical instability dictates pricing and availability.

Supply chain vulnerabilities expose nations to sudden shocks and uncontrollable cost fluctuations, compromising strategic autonomy.

Heavy Subsidies

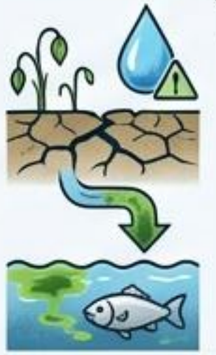
Unsustainable government spending to prevent food shortages.

Direct financial injections are required to mitigate price spikes, creating a massive, long-term fiscal burden without addressing the root cause.

Soil Degradation

Synthetic inputs require increasing water and degrade natural microbiomes, causing toxic runoff and dead zones.

The long-term application of chemical fertilizers erodes soil health, necessitates greater resource consumption, and generates severe environmental consequences, including aquatic ecosystem collapse.



The countries that control fertilizer production may ultimately control food security itself. – Mark Gaalswyk, CEO, EES

Localized, Biological Production Replaces Vulnerable Imports

Nature runs the best closed-loop system on earth. We scale it using modular engineering to accelerate profitable sustainability.

Input: Local Green Food/Organic Biomass Waste
(The resource you already have).

Hardware: EasyFEN™ System
(Modular, automated conversion).

Result: Enhanced Soil Enrichment,
Higher Yields, Clean Food Production.

Output: Terreplenish® Fertilizer
(Liquid microbial soil amendment).

Driven by local waste streams and local demand. No carbon credits required.

EasyFEN™: The Fertilizer Factory in a Box

A fully autonomous, modular conversion system deployable anywhere in the world.

Food-Grade Build: All process contact surfaces are food-grade stainless steel or high-density polyethylene.

Automated Processing: Auto-shreds, squeezes juices, filters via rotating screen, and calculates exact additive ratios for microbial growth.

Precision Controls: Variable speed frequency drives, flow meters, and electronic position indicators ensure exact fluid control.

Global Portability: Container-sized modules fit standard drop-deck trailers; no wide-load permits needed for shipping.

7,500+ Gallons

Terreplenish produced per day.

25,000 Acres

Supported farmland per week.

1 Million Acres

Potential treatment capacity per machine per year.

Terreplenish®: Living, Microbial Nutrition

An organic biological solution that revitalizes soil health and predictably reduces reliance on chemical fertilizers.

- Proprietary blend of soil-regenerating microbes.
- Features free-living natural nitrogen fixers (*Azotobacter Vinelandii*).
- Not a toxic bio-fungicide/pesticide; safe foundation for Integrated Pest Management (IPM) practices.

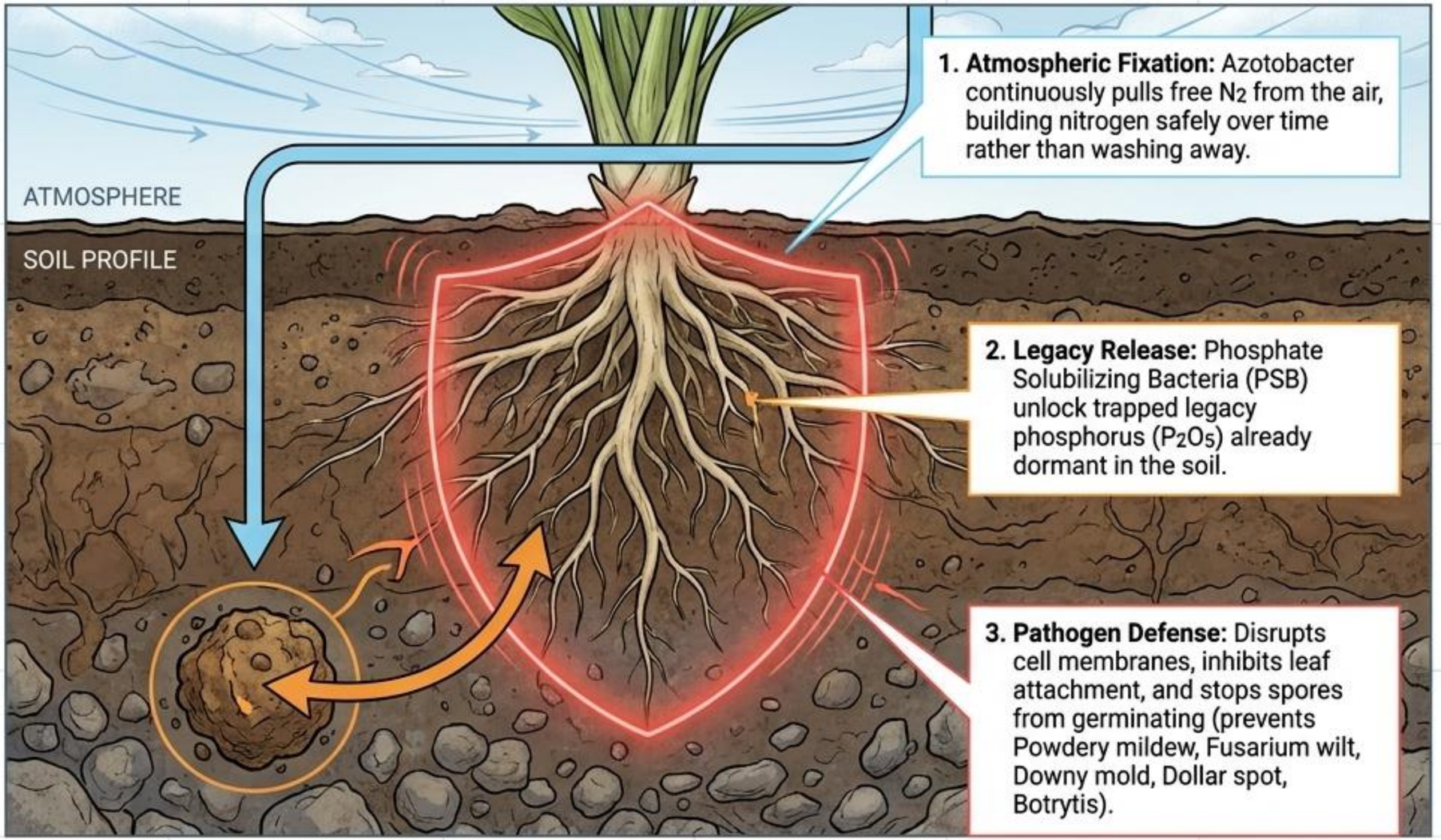
OMRI Listed
(For organic operations).

USDA Certified Biobased Product

CDFA Organic Input Material (OIM)

Tested and validated on **100+ different crops** by 3rd party researchers.

How it Works: Feed Your Roots, Reap the Rewards



45-60 lbs

Nitrogen credit provided per acre.

15-20 lbs

P2O5 freed up per acre.

125%

Increase in soil water retention (reduces irrigation needs by up to 25%).

The Shift from Depletion to Regeneration

	Traditional Synthetic	Terreplenish® Biological
Sourcing & Cost	Imported, subject to volatile geopolitical pricing.	Domestic, fixed-cost utilizing local organic waste.
Nitrogen Action	Washes away in heavy rains, causing toxic runoff and ocean dead zones.	Living microbes stay with the plant, propagating and fixing nitrogen over time.
Water Impact	Depletes soil moisture, requiring heavy irrigation.	Increases soil water-holding capacity by 125%.
Pathogen Resistance	None (requires separate chemical pesticide applications).	Biologically inhibits spore germination and disrupts pathogen cell growth.

Proven in the Field: University of Ghana Trials

Independent trials conducted by the Dept. of Crop Science (Univ. of Ghana-Legon) under irrigated conditions at the Ashiaman Irrigation Scheme.

- 50%

Reduction in synthetic fertilizer usage.

+ 1 Metric Ton

Yield increase per hectare (+12%).

+ $1,000

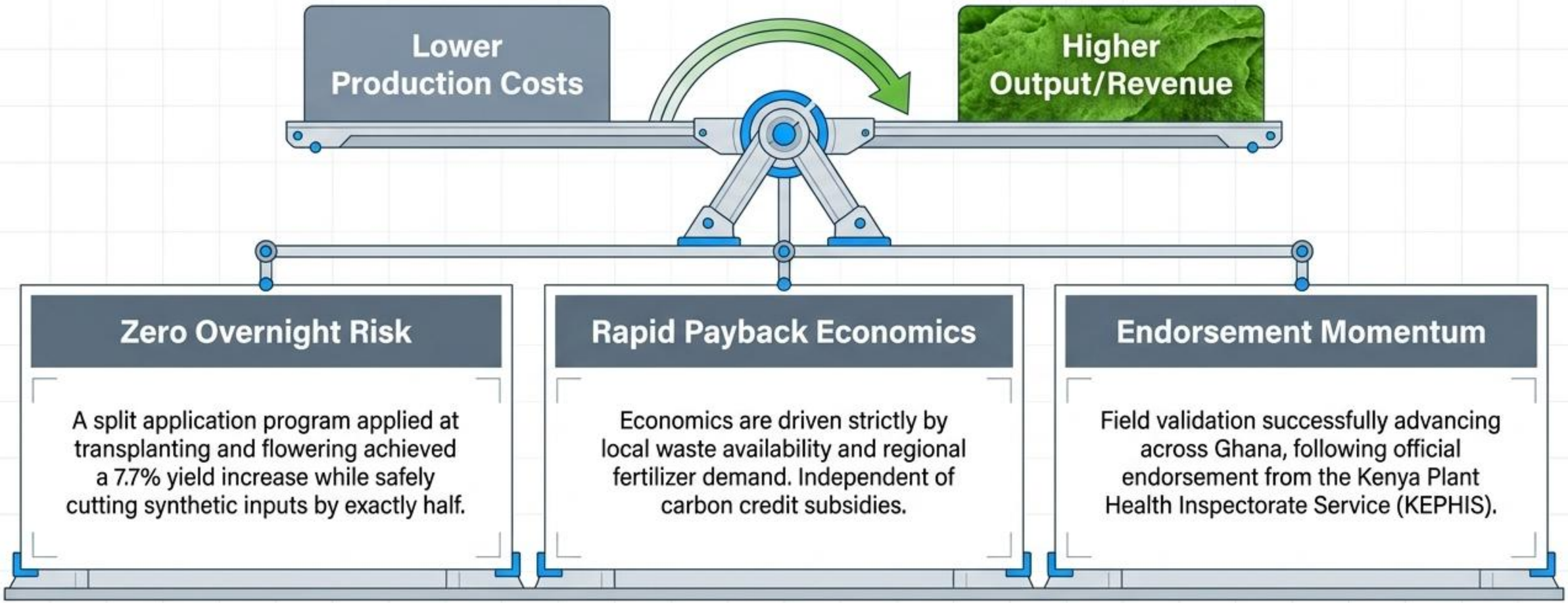
Additional revenue generated per hectare.

Agronomic Benefits Observed:

- ☑ Healthier grain filling & stronger crop vigor.
- ☑ Reduced transplant shock & improved recovery.
- ☑ Increased spikelet fertility & nutrient efficiency.

Profitable Sustainability, Farm by Farm

> The data suggests countries may be able to reduce synthetic fertilizer dependence, lower production costs for growers, improve farmer income, and still improve yields.
>
> – Nate Carpenter, VP of Sales, EES



Zero Overnight Risk

A split application program applied at transplanting and flowering achieved a 7.7% yield increase while safely cutting synthetic inputs by exactly half.

Rapid Payback Economics

Economics are driven strictly by local waste availability and regional fertilizer demand. Independent of carbon credit subsidies.

Endorsement Momentum

Field validation successfully advancing across Ghana, following official endorsement from the Kenya Plant Health Inspectorate Service (KEPHIS).

A Platform of Practical, Modular Solutions

Transforming waste and underutilized resources into clean water, emissions reduction, and renewable energy.

MEPS® (Energy)

Patented, small-scale biorefineries (1M, 2M, 5M gallons/year) that convert organic waste into alternative liquid biofuels. Lower CAPEX per gallon than many large centralized plants.

Auto-Seg (Electricity)

Converts forest waste bio-mass into low-carbon electricity. Ideal for powering local grids and charging infrastructure for electric vehicles.

Nano-Void™ (Water)

Deploys long-lasting nano-bubbles that remain in solution to clean water across Oil & Gas, Aquaculture, and commercial Water Treatment facilities.

A Strategic Necessity

First, the race was energy independence. Then, it was water independence. Agriculture is next.

> **No country wants to explain food shortages while sitting on the raw materials to prevent them.** – Bakry Osman, Director of Africa, EES

Global Momentum: Decentralized fertilizer infrastructure is moving from concept to reality, with active projects, LOIs, and deployments advancing across Ghana, Kenya, Malawi, Saudi Arabia, Uganda, France, and Asia.

Partner with Easy Environmental Solutions

Deploy the next generation of climate-smart, profit-positive technologies today, not someday.

Mark Gaalswyk, Founder & CEO

Tech Leader of the Year (MN); inventor of award-winning modular automated systems; leader of an Inc. 500 company.

Bill Bliler, Dir. of Business Development

30+ years scaling innovative tech to solve global challenges; specialist in strategic assessment and revenue enhancement.

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Our Core Values: Approachability | Empathy | Integrity | Perseverance