

The logo for Synterra Energy, featuring the words "SYNTERRA" and "ENERGY" stacked vertically in a bold, white, sans-serif font. The background of the top half of the slide is a green-to-yellow gradient with a faint, technical drawing of industrial machinery.

**SYNTERRA
ENERGY**

The slogan text, "Powering the Future. Transforming Waste into Energy.", is displayed in a bold, white, sans-serif font against a dark blue background. A horizontal grey bar is positioned above the text.

**Powering the Future.
Transforming Waste into Energy.**

The Global Challenge

- The world produces 2.1 billion tons of waste annually, and less than 20% is recycled.
- Energy demand continues to grow global electricity needs are expected to double by 2050.
- Current renewables (solar, wind) are intermittent and cannot provide reliable baseload power.
- Waste management and energy scarcity are converging global crises.

SYNTERRA ENERGY provides a unified solution: converting waste into renewable, storable, dispatchable energy.

Introducing

SYNTERRA ENERGY

Who We Are

SYNTERRA ENERGY

is a next-generation clean energy company delivering modular, zero-emission power solutions through advanced gasification and graphene solid state energy storage.

Our Mission

To transform global waste streams into renewable, storable, and scalable power redefining the future of energy.

Our Model

A circular energy ecosystem where waste becomes fuel, fuel becomes power, and elevates the quality of life across the planet.

Our Groundbreaking Technology

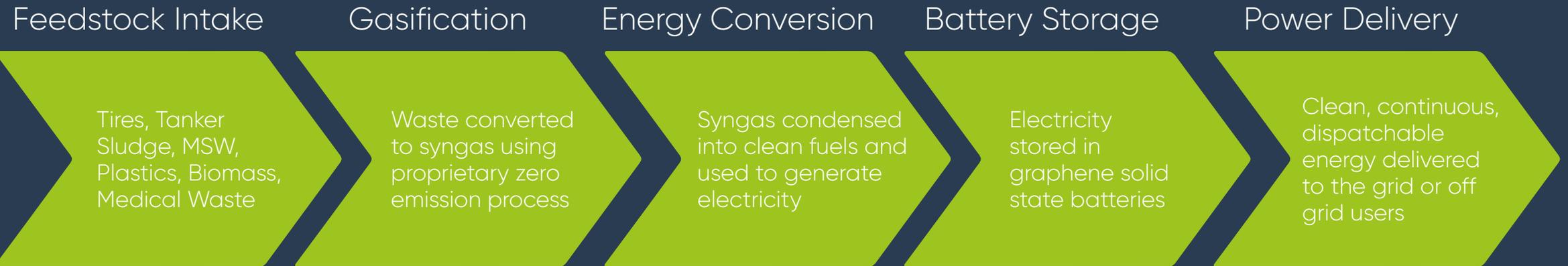
Modular Gasification Plant System (MGP)

- Proprietary closed loop carbonization and gasification process.
- Converts solid waste into syngas, fuel oil, carbon black, and electricity.
- Zero emissions through ionized air filtration and carbon capture.

Graphene Solid-State Batteries

- Non Lithium, Scalable Storage with no fire risk.
- Long Duration Power 20 year life, 500,000+ cycles, 99% efficiency.
- Scalable & Adaptive modular design from MWh to GWh systems.
- Sustainably Built 100% recyclable, lowest lifetime storage cost.

The SYNTERRA Process



Outputs:



Fuel oil



Electricity



Carbon black



Metals



Carbon credits

Key

Advantages

Feature

Zero Emissions

Baseload Renewable Power

Multiple Revenue Streams

Scalable & Modular

Circular Economy Integration

Advanced Energy Storage

Benefit

Closed loop carbon capture system eliminates pollutants.

24/7 energy production unlike solar or wind.

Energy, fuels, carbon credits, and material recovery.

Compact footprint, expandable processing lines & BESS Power

Turns waste into power, power into security and enablement.

Graphene BESS ensures reliability and resilience.

Market Applications

Ports & Shipping

Convert tanker sludge and waste oil into energy.

Industrial Zones

Energy independence and waste remediation.

Mining & Agriculture

On site power and waste to energy integration.

Municipal Waste

Sustainable waste management for cities.

Off-Grid / Islands

Build local, renewable power ecosystems.

Project

Economics

CAPEX:

Base 14 Ton/Hour Plant Cost Starting at \$23.5M* USD

Full Deployment in 12 Months

(*includes 10 MW NexEnergy BESS)

Achieves Generation of up to 10-15 MWH Firm Power depending on Feedstock

Scalable:

Expandable up to 56 tons/hour within one year.

Revenue Sources:

- Power Purchase Agreements (PPAs)
- Carbon credits
- Sale of recovered fuels and byproducts
- Battery system leasing or ownership models

ROI Drivers:

- Multi revenue ecosystem
- Low operating costs due to energy self sufficiency
- Strong ESG and carbon credit positioning

SYNTERRA VS Solar & Wind

Superior Financial Performance

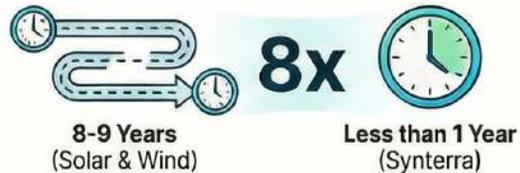
5x Lower Capital Cost (CAPEX)

A Synterra plant costs an estimated \$20M, versus \$68M for solar or \$55M for wind.



8x Faster Payback

Achieve return on investment in less than 1 year, compared to 8-9 years for alternatives.



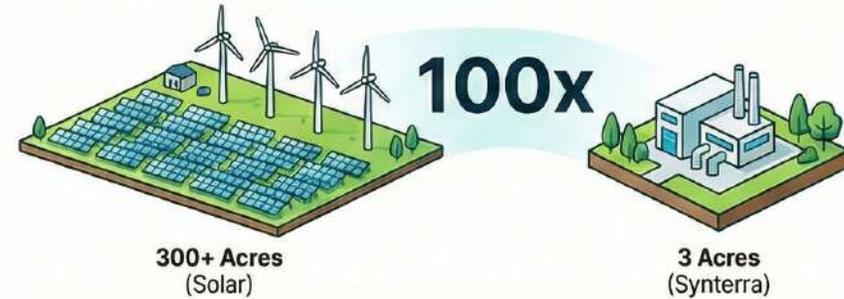
6x More Revenue Streams

Synterra generates income from 6 sources, while solar and wind only produce power.



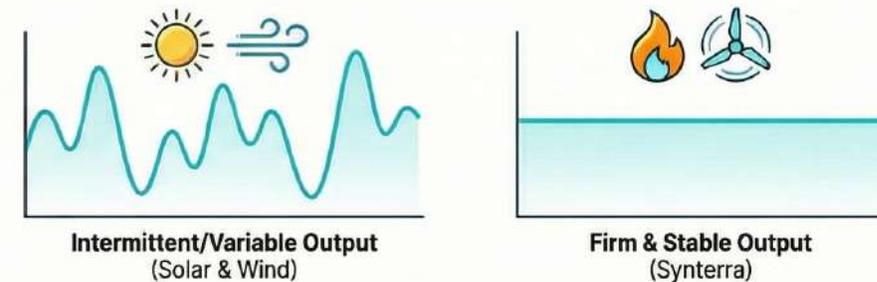
Unmatched Operational Efficiency

100x Smaller Land Footprint



Synterra requires just 3 acres, freeing up land compared to 300+ acres for solar.

Firm & Stable Power Output



Delivers consistent energy, unlike the intermittent or variable output from solar and wind.

Environmental Impact

- Zero Emission Operation through closed loop ionized gas cleanup.
- Carbon Capture: CO₂ converted into stable solids or reused in processes.
- Waste Reduction: Eliminates landfilling and incineration.
- Sustainability: Enables circular economy for energy, waste, and materials.
- Carbon Credits: Each facility generates verified credits for investors and operators.

Competitive Advantage

SYNTERRA ENERGY

Zero emissions

Multiple outputs (fuel, power, credits)

24/7 baseload renewable

Modular, scalable footprint

Integrated BESS

Traditional WtE / Incineration

High CO₂, SO₂, and NO_x output

Single energy output

Intermittent or combustion dependent

Large, fixed installations

No energy storage or grid balancing

Business Model

Building scalable modular
Recovery and Energy
plants enabling regional
deployment and long term
energy infrastructure
growth

DBOO Model

Design, Build, Own and Operate.

Revenue Streams

Energy sales, carbon credits and
recovered materials.

Partnership Model

Joint ventures, licensing and EAAS
and PPA agreements.

Financing Structure

Blended equity, debt, Bonds and
ESG linked capital.

Powering an energized cleaner world by turning waste into sustainable, storable energy.

SYNTERRA ENERGY

stands at the intersection of **clean technology, affordable energy resilience and environmental restoration** transforming the global energy landscape one ton of waste at a time.

The logo for Synterra Energy is displayed in a bold, white, sans-serif font. The text is arranged in two lines: "SYNTERRA" on the top line and "ENERGY" on the bottom line. The background is a dark blue gradient with a faint, light blue technical drawing of an industrial facility, including various pipes, tanks, and structural elements, overlaid on the gradient.

SYNTERRA ENERGY