ASTERA ENERGY

Presentation

Astera Permanent Elimination of Plastic Technology

The Astera Energy Permanent Elimination of Plastic System (PEPS) leverages advanced proprietary technology to transform plastic waste into high-value materials such as graphene. Astera's elimination technology can convert 4 tons of plastic into 2 tons of profitable graphene a day.

Astera Permanent Elimination of Plastic System (PEPS)

Astera Energy Permanent Elimination of Plastic System (PEPS) – Overview

The process begins with grinding plastic into particles, which are then combined with Astera's exclusive SIM1 Catalyst and processed in a microwave system. During this phase, any gaseous byproducts are safely captured through an integrated recovery system, the materials are cooled and extracted. Following initial processing, the output is transferred to a separation system. Samples are analyzed using RAMAN spectroscopy and X-ray diffraction (XRD) technologies to verify composition and grade. This rigorous classification allows Astera to provide real-time inventory data, supporting streamlined sales operations and stringent quality control.

Astera Permanent Elimination of Plastic System (PEPS)

System Components

- PEP system license with SIM1OS software integration
- Dual grinders, precision cutting station, and RFID-enabled HMI/PLC control
- Catalyst mixing units, microwave processing oven, auger feed system
- RAMAN and XRD laboratory analysis suite
- Integrated Battery Energy Storage System (BESS) ranging from 500 kWh to 1 MWh

Infrastructure Requirements

Single Machine:

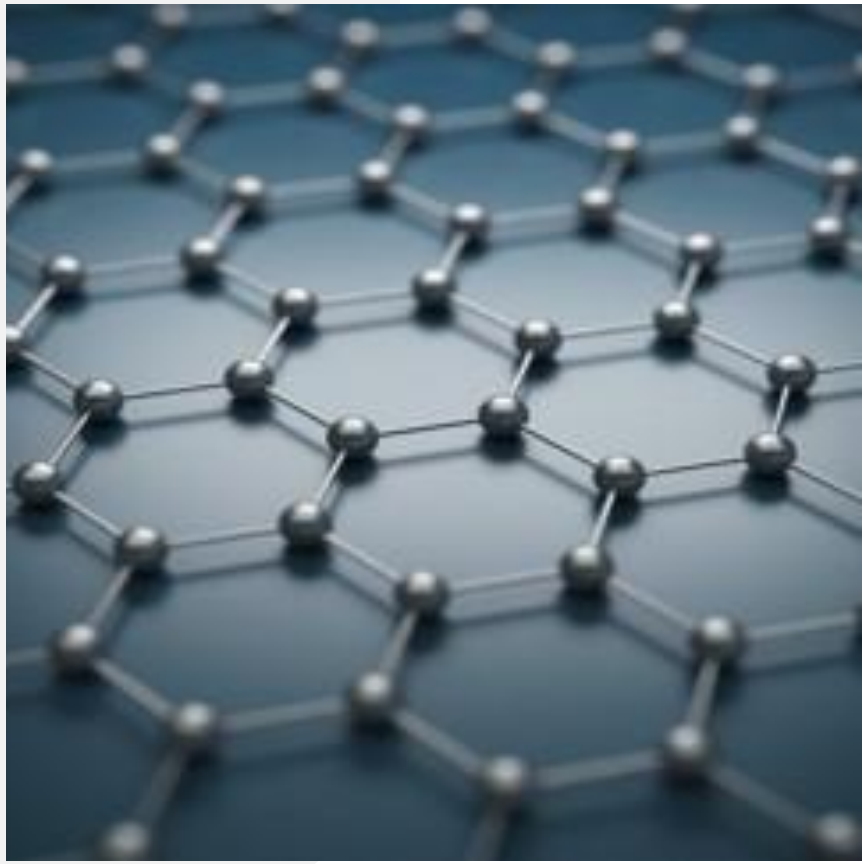
Power: 600 AMPS, 480V, 3-phase electrical service

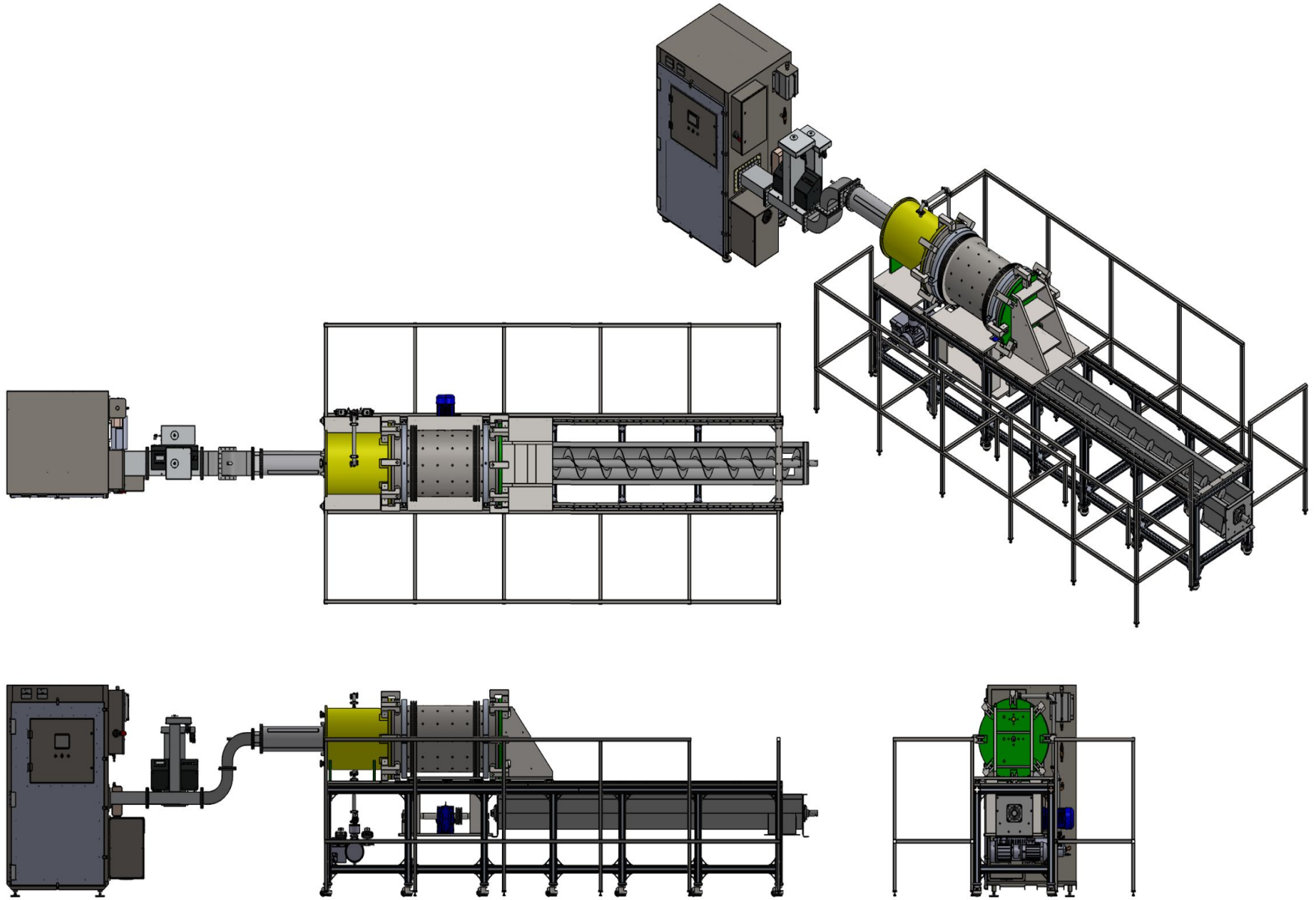
Space: 5,000 sq ft interior facility + 4,000 sq ft exterior yard

This fully integrated, turnkey solution is designed for maximum reliability, precision, and scalability—delivering measurable environmental impact and industrial-grade performance.

What Is Graphene?

- Graphene is exceptionally strong, lightweight, and conductive, making it ideal for enhancing the durability, flexibility, and performance of materials across industries.
- Its ability to improve thermal, electrical, and mechanical properties even in small amounts makes it a powerful additive for revolutionizing products from asphalt to electronics.
- It's largest and most developed applications are in cement, steel and alloys, asphalt, batteries and energy storage, electronics, and paint
- Graphene prices in small quantity range varies from $50-$100/ 100 grams of graphene. In large quantities from $50,000-$150,000/ ton of graphene. Per day, 1 permanent plastic elimination system machine can generate sales ranging from $100,000 to $300,000 of graphene.





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ENG APPR.		
MFG APPR.		
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COMMENTS:		

UNLESS OTHERWISE SPECIFIED:
DIMENSIONS ARE IN INCHES
TOLERANCES:
FRACTIONAL ±
ANGULAR: MACH ± BEND ±
TWO PLACE DECIMAL ±
THREE PLACE DECIMAL ±
INTERPRET GEOMETRIC TOLERANCING PER:
MATERIAL
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NEXT ASSY | USED ON
APPLICATION | DO NOT SCALE DRAWING

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Savage Industrial Machines Inc.

TITLE:
Savage Industrial Machines Inc., Microwave Frame

SIZE DWG. NO. REV
D SIMI-MF-320

SCALE: 1:50 WEIGHT: SHEET 1 OF 1

Single Machine Projections

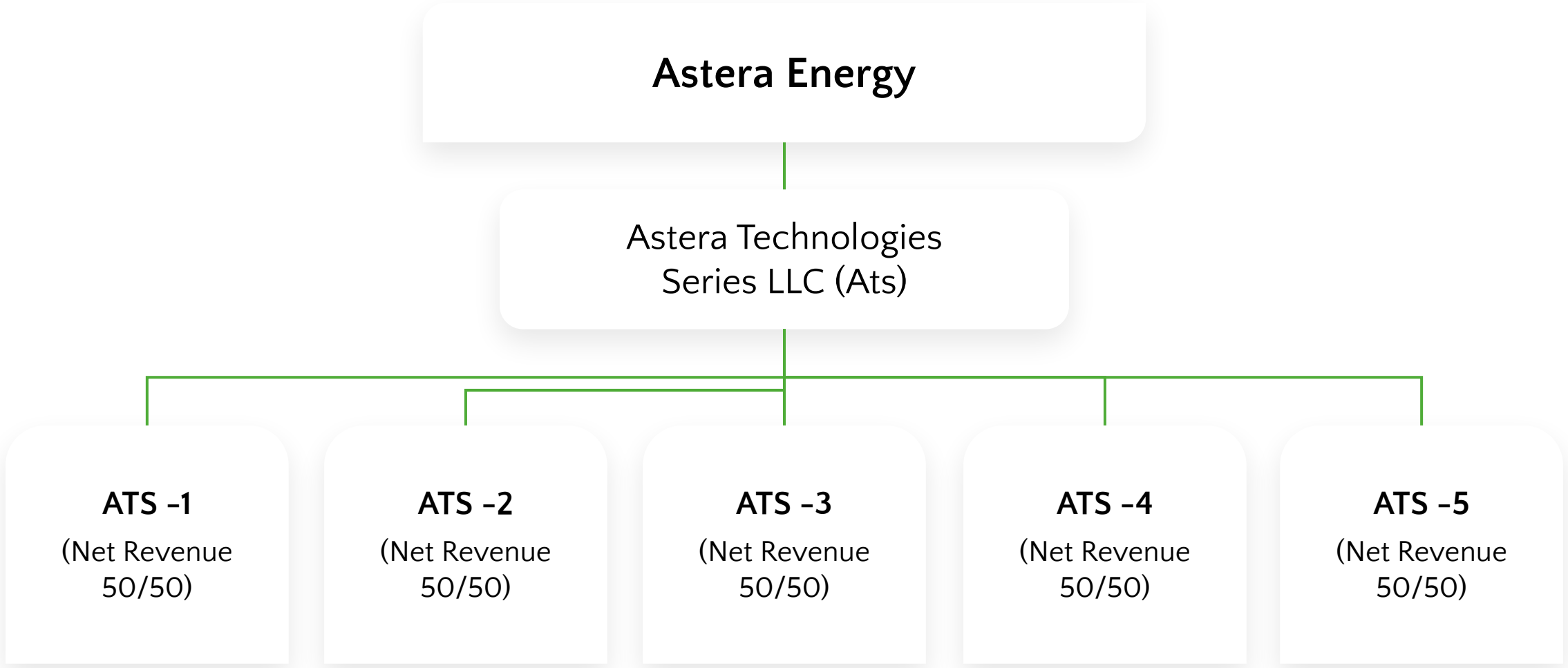
Revenue	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029
Product Revenue					
Iron Carbide	$ 109,824	$ 120,806	$ 132,887	$ 146,176	$ 146,176
Graphite (Amorphous Carbon)	$ 768,768	$ 845,645	$ 930,209	$ 1,023,230	$ 1,067,692
Graphene	$ 19,823,232	$ 21,805,555	$ 23,986,111	$ 26,384,722	$ 29,023,194
Carbon Nanotubes	$ 1,098,240	$ 1,208,064	$1,328,870	$ 1,461,757	$ 1,607,933
Hydrogen	$ 206,976	$ 227,674	$ 250,441	$ 275,485	$ 303,034
SynGas	$ 128,410	$ 141,251	$ 155,376	$ 170,913	$ 188,004
Total Product Revenue	$ 22,135,450	$ 24,348,995	$ 26,783,894	$ 29,462,283	$ 32,350,651
TOTAL REVENUE	**$ 22,135,450**	**$ 24,348,995**	**$ 26,783,894**	**$ 29,462,283**	**$ 32,350,651**
Projected Costs	**FY 2025**	**FY 2026**	**FY 2027**	**FY 2028**	**FY 2029**
Energy Related Expenses	$ 105,600	$ 110,880	$ 116,424	$ 122,245	$ 128,357
Catalyst Production Expenses	$ 396,000	$ 415,800	$ 436,590	$ 458,420	$ 481,340
Labor Related Expenses	$ 4,878,420	$ 5,122,341	$ 5,378,458	$ 5,647,381	$ 5,929,750
Lab and Separation Expense	$ 1,253,200	$ 1,315,860	$ 1,381,653	1,450,736	$1,523,272
Sales Expense	$ 194,000	$ 203,700	$ 213,885	$ 224,579	$ 235,808
Raw Materials Costs	$ 89,258	$ 93,721	$ 98,407	$ 103,327	$ 108,494
	$ 6,916,478	**$ 7,262,302**	**$ 7,625,417**	**$ 8,006,688**	**$ 8,407,022**
General Administration Cost					
Administrative / Staff	$ 2,825,500	$ 2,966,775	$ 3,115,114	$ 3,270,869	$ 3,434,413
Technology License	$ 600,000	$ 630,000	$ 661,500	$ 694,575	$ 729,304
Research & Development	$ 221,354	$ 232,422	$ 244,043	$ 256,245	$ 269,058
Operation Expense -Rent, Ins.	$ 800,000	$ 840,000	$ 882,000	$ 926,100	$ 972,405
Misc Expenses	$ 720,000	$ 756,000	$ 793,800	$ 833,490	$ 875,165
Total Cost	**$ 5,166,854**	**$ 5,425,197**	**$ 5,696,457**	**$ 5,981,280**	**$ 6,280,344**
Total Cost/Expense	**$ 12,083,332**	**$ 12,687,499**	**$ 13,321,874**	**$ 13,987,968**	**$ 14,687,366**
Revenue Share	$ 5,000,000	$ 5,000,000	$ 2,500,000		
PROFIT BEFORE TAX And After REVENUE SHARE	$ 5,052,117	$ 6,661,495	$ 10,962,020	$ 15,474,316	$ 17,663,284
31% Rate of Corporate Taxes	$ 1,566,156	$ 2,065,064	$ 3,398,226	$ 4,797,038	$ 5,475,618
Earnings after Taxes	$ 3,485,961	$ 4,596,432	$ 7,563,794	$ 10,677,278	$ 12,187,666
Dividens Based on 10%	$ 348,596	$ 459,643	$ 756,379	$ 1,067,728	$ 1,218,767
Profit Before Depreciation and Amortization	$ 3,137,365	$ 4,136,789	$ 6,807,414	$ 9,609,550	$ 10,968,900
Profit on revenue %	14%	17%	25%	33%	34%

How To Invest

Investor Funding 1 Machine/ Subject to Multiple

1. The investor will invest $5 million for the placement of a PEP System
2. Within 30 months of the investment, the investor will be paid back $12.5 million from gross revenues
3. $7.5 million in gains which equals a 50% annualized return on investment
4. Managed through a series LLC entity
5. Quarterly distributions of the revenue share portion
6. Multiple machine investment possible
7. Full transparency and accounting disclosures
8. Investor executes a “Revenue Share Promissory Note”

Astera Energy – Plastic to Graphene Systems – Series LLC Chart – Structure



The Astera Team

Robert Switzer

Founder Chairman & CEO

Bob White

Chief Technology Officer

Rob Kee

Chief Operations Officer

Vered Nisim

Chief Strategist

Dora Coy

Colombia Operations

Harry Zink

Infrastructure and Data Centers

Andrew Switzer

Project Manager

Ofer Saha

VP, Business Development

Aaron Smith

Director, Construction

Samantha Ashby

Project Manager

Mounica Gopisetty

Electrical Engineer

Contact Information

Robert Switzer Astera Energy Inc | Chairman

Mobile: (615) 476-7878

Office: (562) 676-4320

1 World Trade Center, 8th Floor
Long Beach, CA 90831

Email: robert.switzer@asteraenergy.com

Website: www.asteraenergy.com