



# BioLargo

We Make Life Better

*The innovation engine for a better tomorrow*

*Annual Earnings Call for Year  
Ended December 31, 2024*

**Stock Symbol:  
OTCQX:BLGO**

# Safe Harbor Statement

All statements, other than statements of historical fact, included in this presentation and management's explanation and discussion of this presentation, regarding our strategy, future operations, future financial position, future revenues, projected costs, prospects and plans and objectives of management are forward-looking statements. The words "anticipates," "believes," "estimates," "expects," "intends," "may," "plans," "projects," "will," "would" and similar expressions, including graphical information, are intended to identify forward-looking statements, although not all forward-looking statements contain these identifying words. We have based these forward-looking statements on our current expectations and projections about future events. Although we believe that the expectations underlying our forward-looking statements are reasonable, these expectations may prove to be incorrect, and all of these statements are subject to risks and uncertainties. Therefore, you should not place undue reliance on our forward-looking statements. We have included important risks and uncertainties in the cautionary statements about our business in our filings with the Securities and Exchange Commission, particularly the section titled "Risk Factors" in our Form 10-K and subsequent filings. We believe these risks and uncertainties could cause actual results or events to differ materially from the forward-looking statements that we make. Should one or more of these risks and uncertainties materialize, or should underlying assumptions, projections or expectations prove incorrect, actual results, performance or financial condition may vary materially and adversely from those anticipated, estimated or expected. In the light of these risks and uncertainties, the forward-looking events and circumstances discussed in this presentation may not occur, and actual results could differ materially from those anticipated or implied in the forward-looking statements. Any forward-looking statement made by us is based only on information currently available to us and speaks only as of the date on which it is made.



# Who we are

- Innovators, scientists, engineers, and entrepreneurs
- Passionate about sustainability and human health
- Driven by a mission to *make life better*





# What we do

- Best-in-class solutions for cleantech problems
- Focus on problems without good solutions
- Aim for partnerships and spin-outs to capitalize on our IP

## The BioLargo Innovation Engine



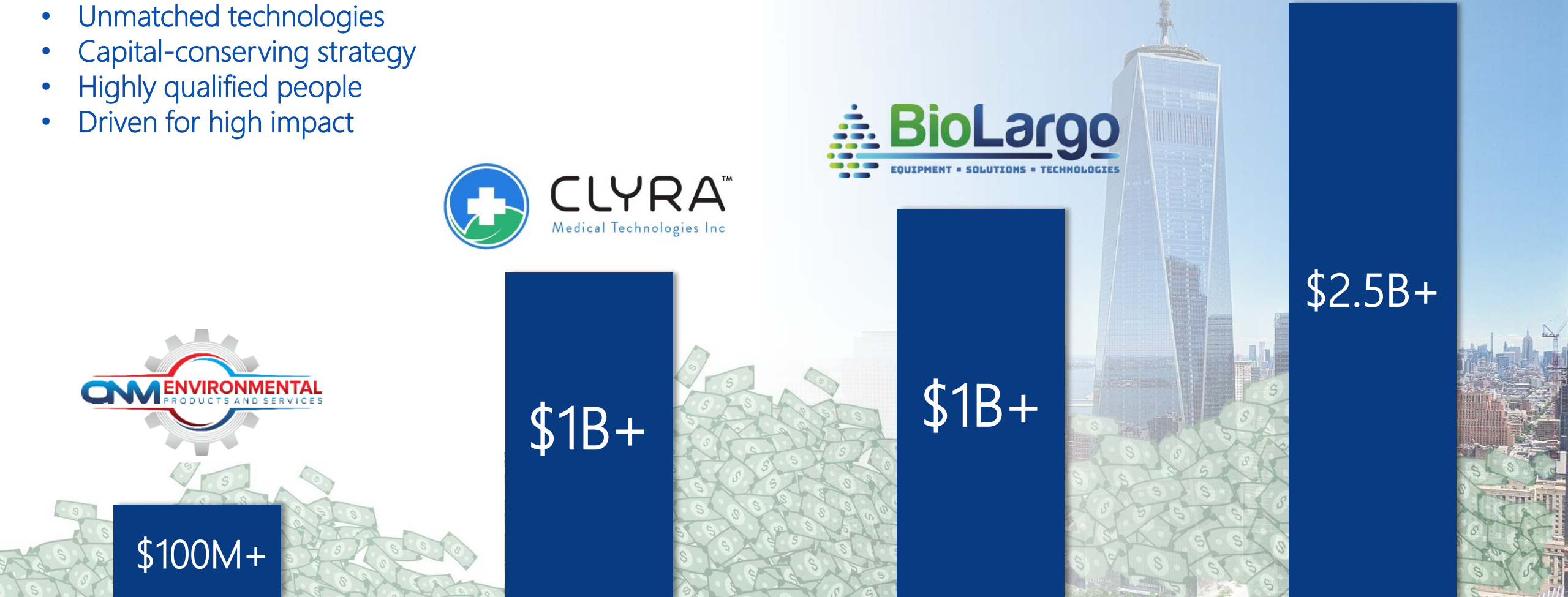
## Investing in...



# The Unseen Value of the BioLargo Portfolio



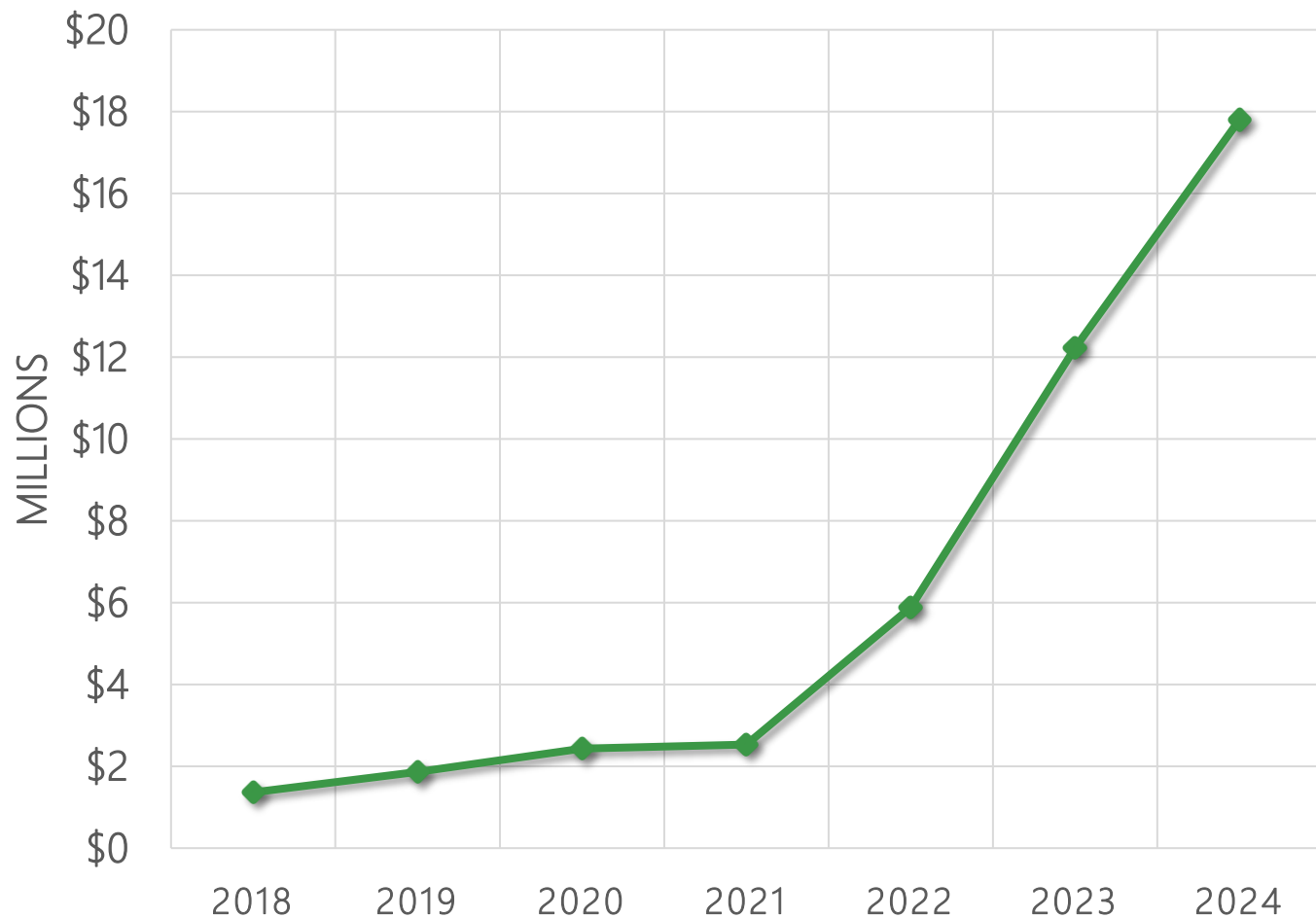
- Unmatched technologies
- Capital-conserving strategy
- Highly qualified people
- Driven for high impact



*These are targeted minimum future values for our portfolio companies, based on management's modeling. This analysis does not include other technologies in BioLargo's portfolio. All business plans are subject to inherent risks and market barriers to entry. \*See Company's Annual and Quarterly Reports on Forms 10-K and 10-Q to understand all risks involved in the company's business plan.*



## ANNUAL REVENUE



*\*Trends are not necessarily indicative of future performance, and future revenues are highly dependent on our partners' performance.*

## Financial Highlights:

### Annual revenues:

- \$17.8 million
- 45% increase year-over year
- Revenue cumulatively up 600% since 2021

### Annual net loss:

- \$4,347,000 net loss, of which \$3,490,000 is from Clyra operations
- 6% decrease year-over-year
- Non-cash expenses were \$2,479,000 (57% of net loss)

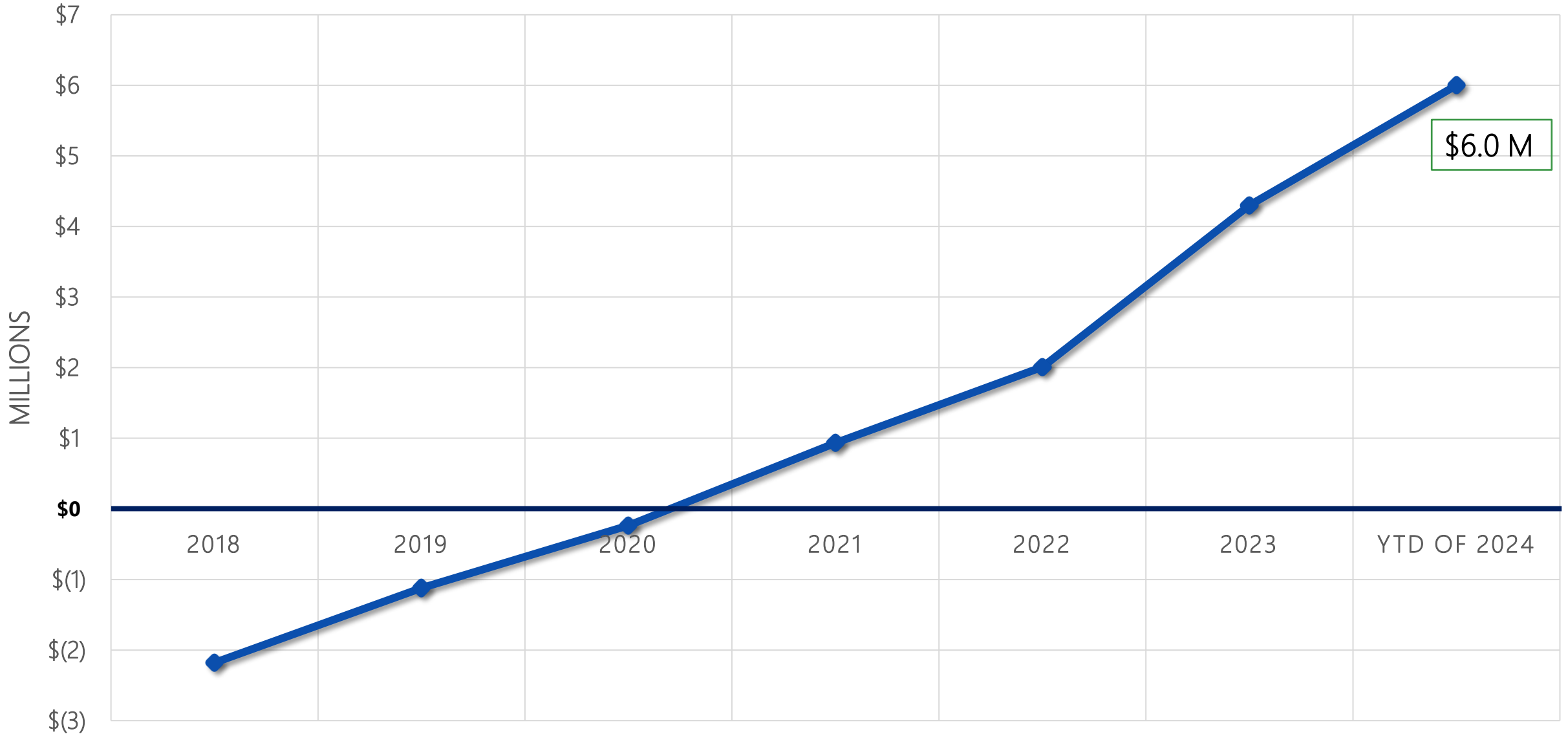
### Net cash used in operating activities

- \$3,206,000 vs \$2,365,000 in 2023
- Less reliant on equity financing
- Clyra's cash used in operating activities ~\$1 million

### Other highlights:

- BioLargo invested \$940,000 in Clyra
- BLEST third party revenues increased by 183% to \$2,182,000 (\$878,000 from AEC sale)
- ONM generated >\$5 million profit

# TOTAL STOCKHOLDER'S EQUITY



*Trends are not necessarily indicative of future performance*





8

Unique Products

15+

SKUs



# Major Retail Outlets





# POOPH – Consumer pet odor product

- Product marketed and sold by our partners, award-winning consumer product experts (Pooph, Inc.)
- ONM receives manufacturer's margin and a royalty on sales
- Business strategy: ramp up sales and sell to a major consumer products company
  - ONM would receive 20% of exit



# Pooph – Summary

- 2024 record year
- Four product lines:
  - Sprays, Wipes, Litterizer, and Potty Pads
- Ongoing discussions re: more products
- Pooph continues to be loved by customers and retailers







**CLYRA™**  
Medical Technologies Inc

# Clyra Medical Technologies

## THE CLYRADVANTAGE

- Supporting 3rd-party FDA-compliant manufacturing with >\$2 million of specialized equipment to support upcoming distribution
- Keystone has invested >\$3 million in equipment and “clean room”
- Recently confirmed scaled manufacturing capability with Clyra’s manufacturing partner and planned distribution partner
- Distribution agreement in final stages of development with partner



# The Market

- Surgical procedures: Approximately 48 million surgical procedures are performed in the United States each year
- Wound and burn care: Over 8 million people suffer from chronic wounds in the US
- Dental procedures: An estimated 60 to 80 million procedures occur in the US annually
- Dermatology: Affects 50 million people in the US, with an estimated 4-5 million people suffering from severe acne

*Initial Market*

*Growth Market*

*Growth Market*

*Growth Market*



Large Market - 100 million patients annually in the US





BioLargo's Cellinity battery technology was created to provide a better option for battery energy storage than lithium-ion, empowering grid stability and storage of renewable energy.

Compared to lithium-ion, Cellinity is:

## CELLINITY BATTERY



### 1 SAFER

Far safer because it has no risk of fire or explosion



### 2 SUSTAINABLE

More sustainable because it contains no rare earth metals or toxic chemicals



### 3 DURABLE

Lasts longer because its performance does not degrade with each cycle



### 4 EFFICIENT

Is more energy dense, making it ideal for large format energy storage





Business | Charging forward

## Clean energy's next trillion-dollar business

Grid-scale batteries are taking off at last

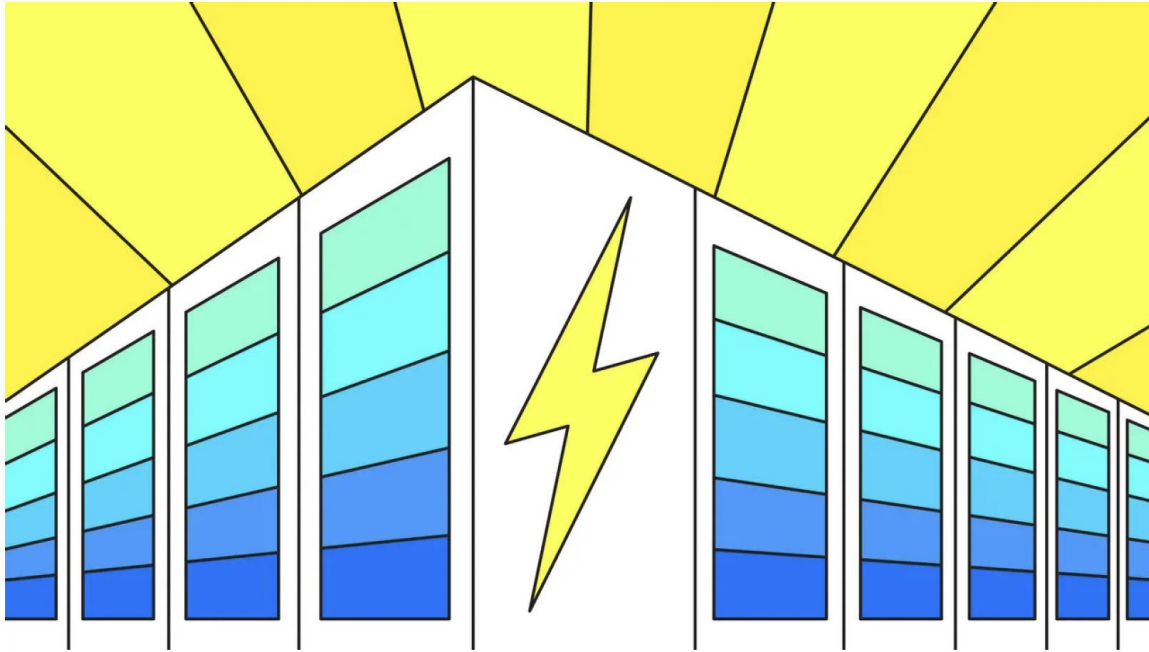


ILLUSTRATION: ROSE WONG

“global energy storage experts have predicted the global supply of battery energy storage will need to increase from today's 200 gigawatts to more than a terawatt by 2030 and more than five terawatts by 2050, fueling a market projected to be worth between \$200 billion and \$700 billion by 2030 and between \$1 and \$3 trillion by 2040.”

# The Problems with Lithium Batteries

- Explosive
- High risk of thermal runaway
- Global supply chain risk
- Poor environmental outcomes



# Why Choose Cellinity Instead of Lithium Ion?

Factor	Li-ion (NMC/LFP)	Cellinity
<b>Safety factors</b>	Fires Explosions Thermal runaway	No fires No explosions No thermal runaway
<b>Ecological factors</b>	Poor social and environmental outcomes from lithium and cobalt mining.  End-of-life concerns	All materials can be ethically produced without significant ecological concern  No end-of-life concerns
<b>Climate sensitivity</b>	Unable to charge below freezing temperatures Needs heavy cooling at high temps	None
<b>Supply chain factors</b>	Rare earth metals, supply-limited materials (e.g., lithium, cobalt, nickel)	All earth-abundant, domestically source-able materials
<b>Self discharge</b>	10% per month	None
<b>Useful life</b>	5-10 years	20 years
<b>Accessible energy (min/max state of charge)</b>	80% (charge states can't go below 10% or above 90%)	95-100%
<b>Average price of battery systems (\$/kWh, utility-scale systems, 2022 dollars)</b>	\$302/kWh <sup>2</sup> (includes battery packs, containers, thermal management system, and fire suppression system)	\$190/kWh
<b>Price comparison to Tesla</b>	\$971,700 (\$250/kWh) (one 3.9 mWh 4-hr Tesla Megapack)	\$300,000 (\$190/kWh) (one 1.5 mWh Cellinity System)
<b>\$/kW-year O&amp;M costs from battery replacement and augmentation</b>	\$30 per kW <sub>DC</sub> per year <sup>1 2</sup>	TBD - low

<sup>1</sup>[https://atb.nrel.gov/electricity/2024/utility-scale\\_battery\\_storage](https://atb.nrel.gov/electricity/2024/utility-scale_battery_storage)

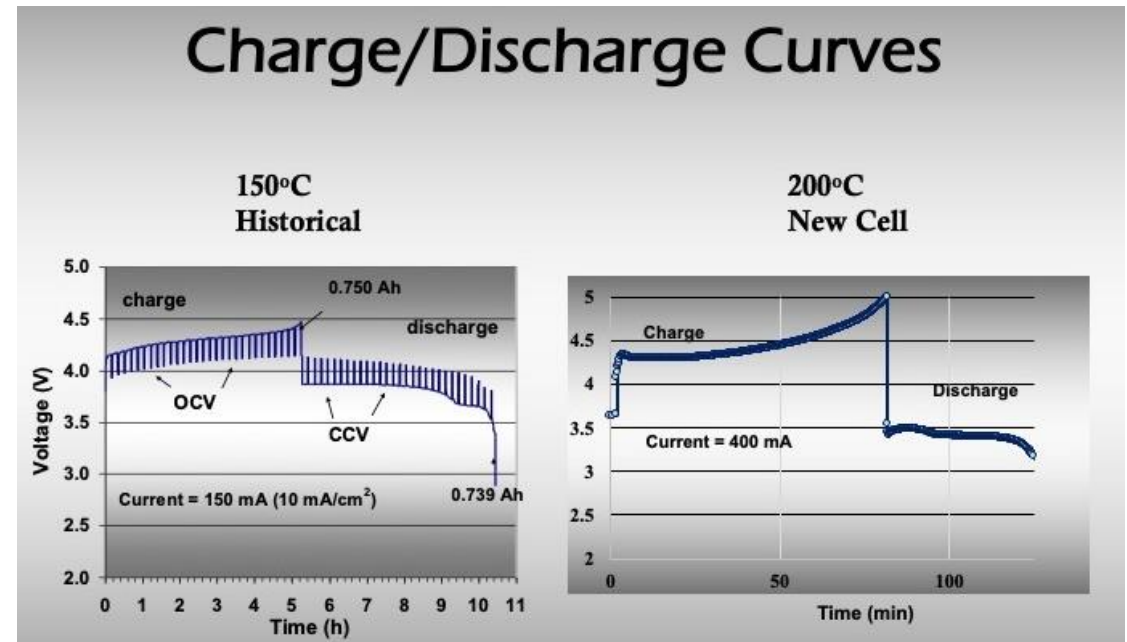
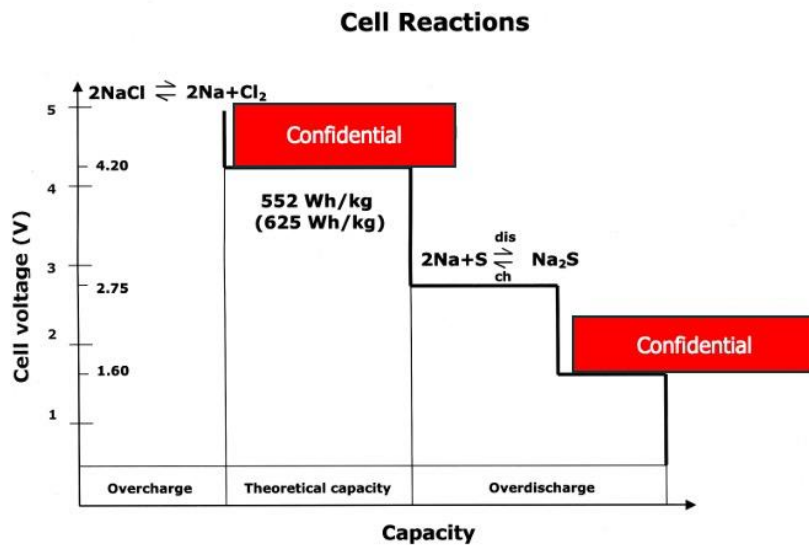
<sup>2</sup><https://www.nrel.gov/docs/fy23osti/87303.pdf>

# Compared to other Battery Chemistries

Specification	Lithium-ion (cobalt oxide)	Sodium-ion	Molten calcium antimony	Lead acid	Nickel cadmium	BioLargo Battery (Liquid Sodium)
Energy density (Wh/kg)	150-190	75-165	Low	30-50	45-80	552
Life cycle (down to 80% discharge)	500-1,000	2,000-6,000	No loss in discharge	200-300	1,000	No loss in discharge
Open circuit cell voltage (V)	3.7	~2.1	~2.5	2	1.2	4.2
Operating temperature (°C)	0 to 45	-20 to 40	~500	-20 to 50	-20 to 65	120 to 250
Self-discharge (%/month)	<10%	Negligible		5%	20%	0
Safety considerations	<ul style="list-style-type: none"> <li>• Serious fires can occur, protection circuit mandatory</li> <li>• Thermal runaway possible</li> </ul>	No serious risks	<ul style="list-style-type: none"> <li>• Jacket is very hot (minor safety concern)</li> <li>• Not to be shaken</li> </ul>	<ul style="list-style-type: none"> <li>• Very toxic</li> </ul>	<ul style="list-style-type: none"> <li>• Very toxic</li> <li>• Fuse protection required</li> </ul>	<ul style="list-style-type: none"> <li>• NO THERMAL RUNAWAY</li> <li>• Insulated for high temperatures</li> </ul>
Toxicity considerations	Low	Low risk	Contains antimony (toxic)	Very toxic	Very toxic	Low risk
Materials	Scarce	Earth-abundant	Earth-abundant	Diverse supply	Cadmium rare	Earth-abundant



# Exceptional Technical Performance

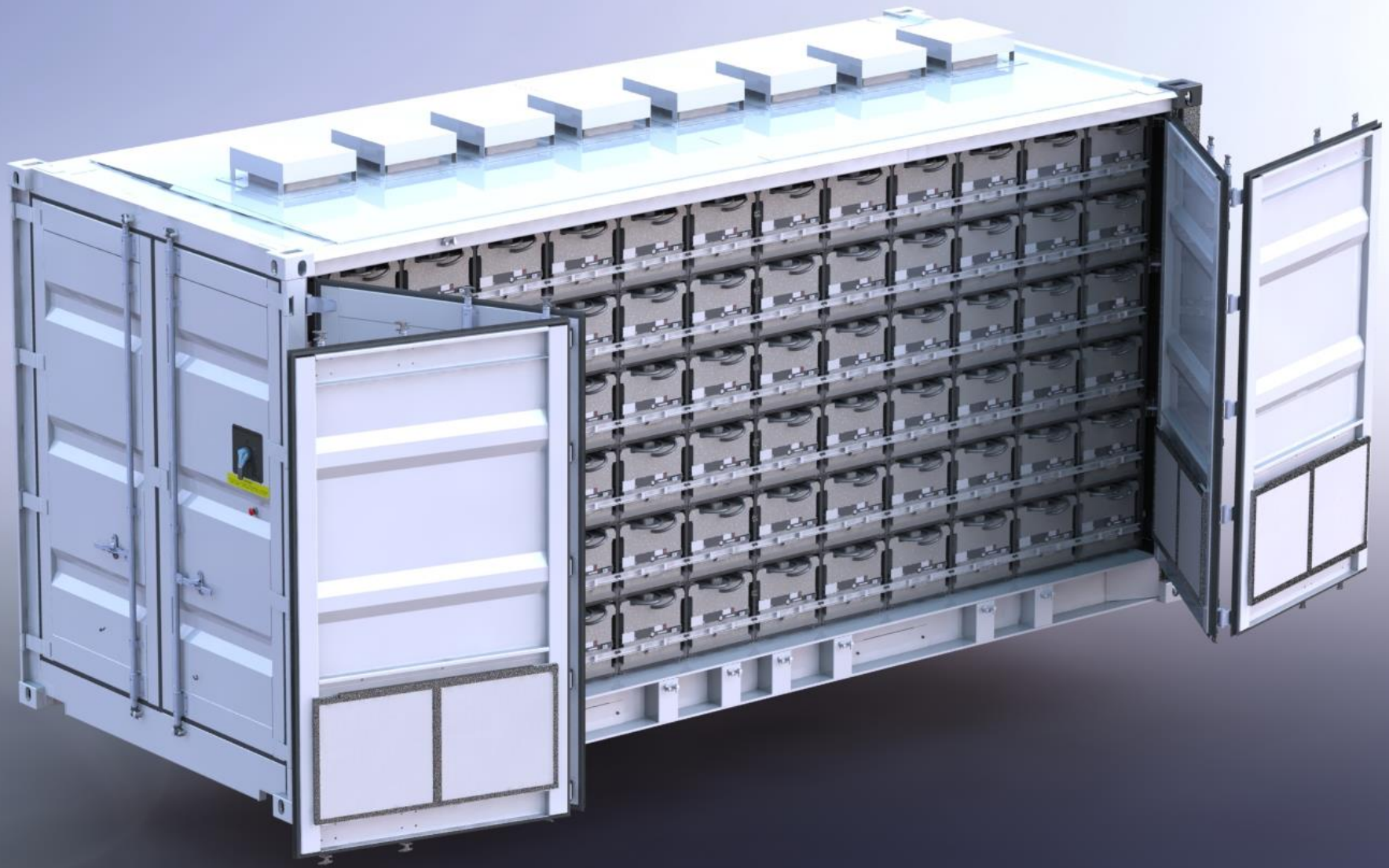


# Initially Targeting Two BESS Module Sizes:

1-2 MWh

~25 KWh





# Target Markets

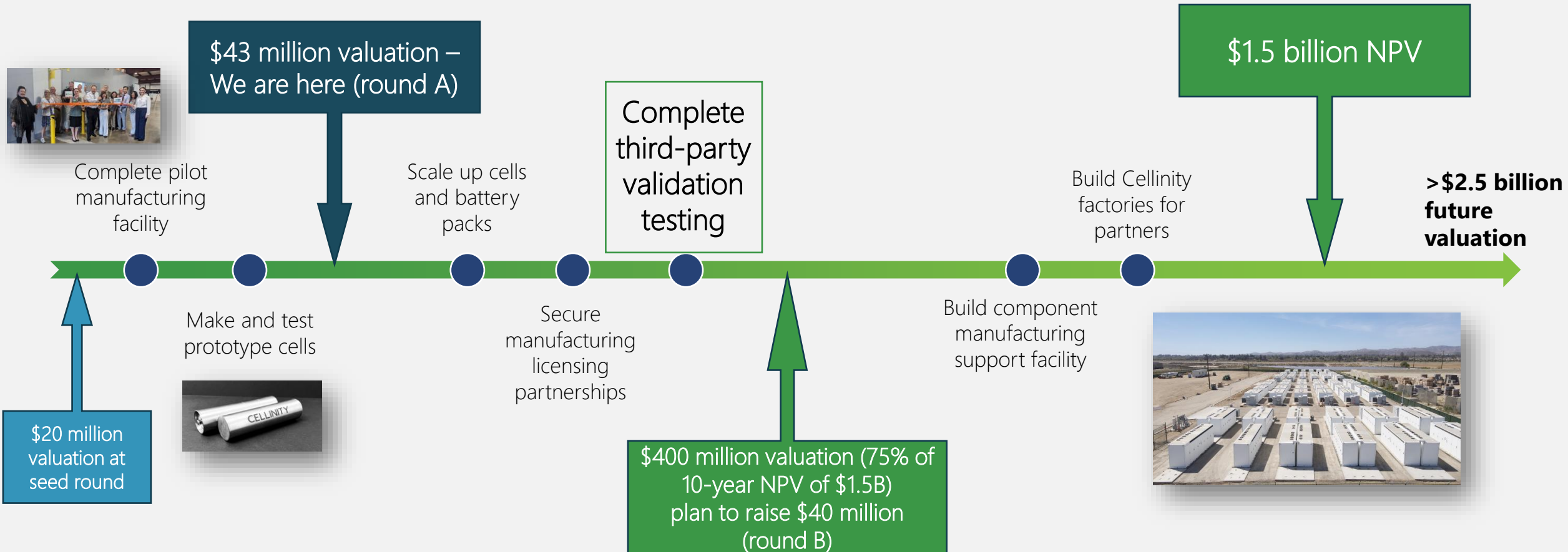
*What do they have in common? Static, large-format energy storage uses*

- Renewable energy storage / grid-scale storage
- Microgrids for localized power consumers
- EV charging stations
- Residential backup power stations for homes, businesses, hospitals, etc.
- Emergency response / disaster relief





# Commercialization Pathway and Valuation Roadmap



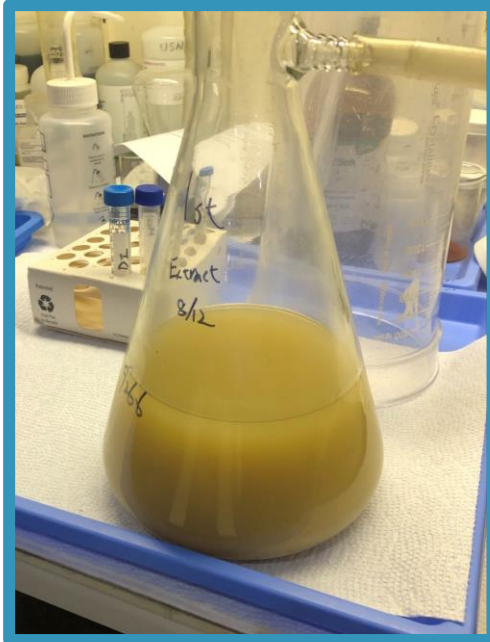


***A Broad-Spectrum,  
Low-Waste PFAS  
Capture Technology  
and Efficient  
Destruction***





# Why waste production matters



**~1-2 lbs of concentrate**

**Waste generated from treating 20,000 gallons of PFAS contaminated water**

## Granular Activated Carbon Treatment



**20-40,000 lbs of spent carbon**



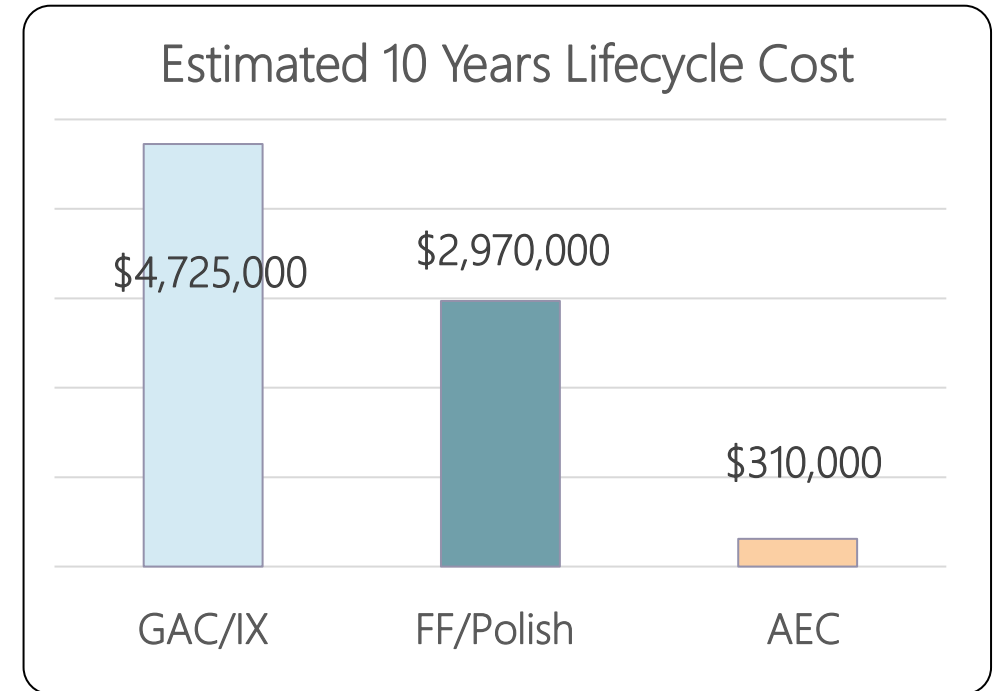


- New patents on file:
  - Membrane stripping process
  - PFAS destruction technology
- Paid pilot studies “try before you buy”
- Impressive performance and economics data now available – 90% improved 10-year lifecycle costs compared to GAC-based systems
- NJ project – equipment ready to ship, contractor finally has “broken ground”



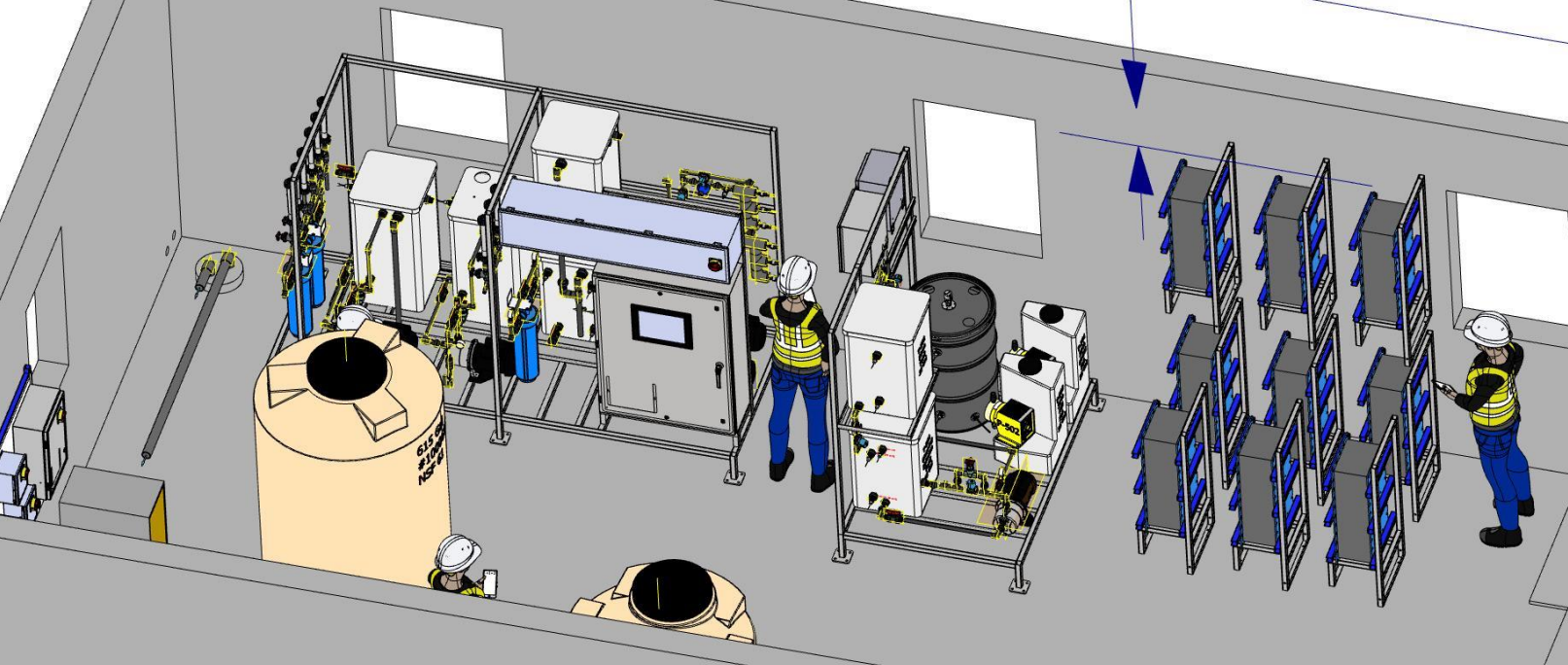
# Cost Comparison 10,000 GPD Leachate System

Process	Installed/Capital Cost (reference)	Daily O&M Cost (energy + consumables)	Annual O&M Cost (365 days + disposal)	Total Annual Cost (O&M only, excl. capital)
Ion Exchange / Activated Carbon	\$4–5 million * High (includes filtration pretreatment)	~\$1,400–\$1,500/day (primarily media replacement, pumping energy nominal)	~\$500k–\$550k/year (includes frequent media change-out & disposal of spent resin/GAC)	~\$525k/year (recurring O&M, excludes capital)
Foam Fractionation + Polishing (Foam Fractionation + Ion Exchange/Carbon)	\$6–7 million* Very High (for foam fractionation system; includes polishing unit)	~\$800–\$900/day (foam system energy is low; some consumables; reduced media use for polishing)	~\$300k–\$330k/year (includes power for foam unit, concentrate handling/disposal, and minimal media replacement)	~\$330k/year (recurring O&M, excludes capital)
AEC System (4 stage system )	\$2.5 million Moderate (combined cost of all stages)	~\$100/day (electrical energy for all stages; very little chemical or media use)	~\$31k/year (≈\$26k energy + \$5k waste disposal for spent concentrate media)	~\$27k-31k/year (recurring O&M, excludes capital)



Costs based on 2024, Operation and Cost Considerations PFAS Treatment in Landfill Leachate presentation by Ivan Cooper, [swanafl.org](https://swanafl.org)

\* All cost are estimates including engineering and construction costs



# Lake Stockholm, NJ: First Commercial Installation

- First drinking water project
- Factory acceptance testing complete
- Equipment ready to deliver
- Waiting for general contractor to finish building

# PFAS – More than just drinking water treatment

New markets coming online in anticipation of new regulations

## Landfill Leachate



Post AEC

Post AOP

Post EC

Untreated

## Firefighting Foam



## Wastewater and Industrial





# The BioLargo Family of Companies

BioLargo, Inc. is a sustainable science, technology & full-service environmental engineering company that makes life better by delivering world-class products and services across a broad range of industries, with a drive to deliver clean water, clean air, and advanced antimicrobials for healthcare.



**OTCQX:  
BLGO**

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