



microvast<sup>®</sup> 

Forward Thinking. Powering Now.™

2023  
INVESTOR  
DAY

# Disclaimer

## Forward-Looking Statements

This communication contains “forward-looking statements” within the meaning of the Private Securities Litigation Reform Act of 1995. Such statements include, but are not limited to, statements about future financial and operating results, our plans, objectives, expectations and intentions with respect to future operations, products and services; and other statements identified by words such as “will likely result,” “are expected to,” “will continue,” “is anticipated,” “estimated,” “believe,” “intend,” “plan,” “projection,” “guidance,” “outlook” or words of similar meaning.

Such forward-looking statements are based upon the current beliefs and expectations of our management and are inherently subject to significant business, economic and competitive uncertainties and contingencies, many of which are difficult to predict and generally beyond our control.

Actual results, performance or achievements may differ materially, and potentially adversely, from any projections and forward-looking statements and the assumptions on which those forward-looking statements are based. All information set forth herein speaks only as of the date hereof and we disclaim any intention or obligation to update any forward-looking statements as a result of developments occurring after the date of this communication. Forecasts and estimates regarding Microvast’s industry and end markets are based on sources we believe to be reliable, however there can be no assurance these forecasts and estimates will prove accurate in whole or in part.

Microvast’s annual, quarterly and other filings with the U.S. Securities and Exchange Commission identify, address and discuss these and other factors in the sections entitled “Risk Factors.”

2023  
INVESTOR  
DAY

# Today's Agenda

## 01 Company Overview



**YANG WU**

*Founder, CEO, President*

## 02 Commercial Vehicle



**SASCHA KELTERBORN**

*Chief Revenue Officer*

## 03 Energy Storage



**ZACH WARD**

*President, Energy Division*

## 04 Technology



**WENJUAN MATTIS, Ph.D.**

*Chief Technology Officer*

## 05 Manufacturing



**SHANE SMITH**

*Chief Operating Officer*

**BREAK**

## 06 Financials



**CRAIG WEBSTER**

*Chief Financial Officer*

## 07 Closing Remarks



**YANG WU**

*Founder, CEO, President*

# — Strategic Overview



## Yang Wu

FOUNDER, CHIEF EXECUTIVE OFFICER, PRESIDENT

# Today's Objectives



Show that Microvast is in a **multi-year high-growth phase**



Demonstrate the **technological innovation and leadership** of the new HpCO 53.5Ah cell



Provide a **clearly defined expansion plan & route to profitability**



# How It Started

## Microvast began with an idea.

We invested heavily in research to identify customer needs, as well as the R&D to create the battery the industry **really** needed.



“  
We can create a better battery for EVs.”

- ✓ Ultra-fast charging capability
- ✓ Sync battery life with vehicle life
- ✓ Superior safety
- ✓ High energy density

HIGHLIGHTS

2006

Founded in U.S. and began customer research analysis

2011

Launched first 10-minute ultra-fast charging battery

2016

Launched 15-minute fast charging and high cycle life NMC cell

2022

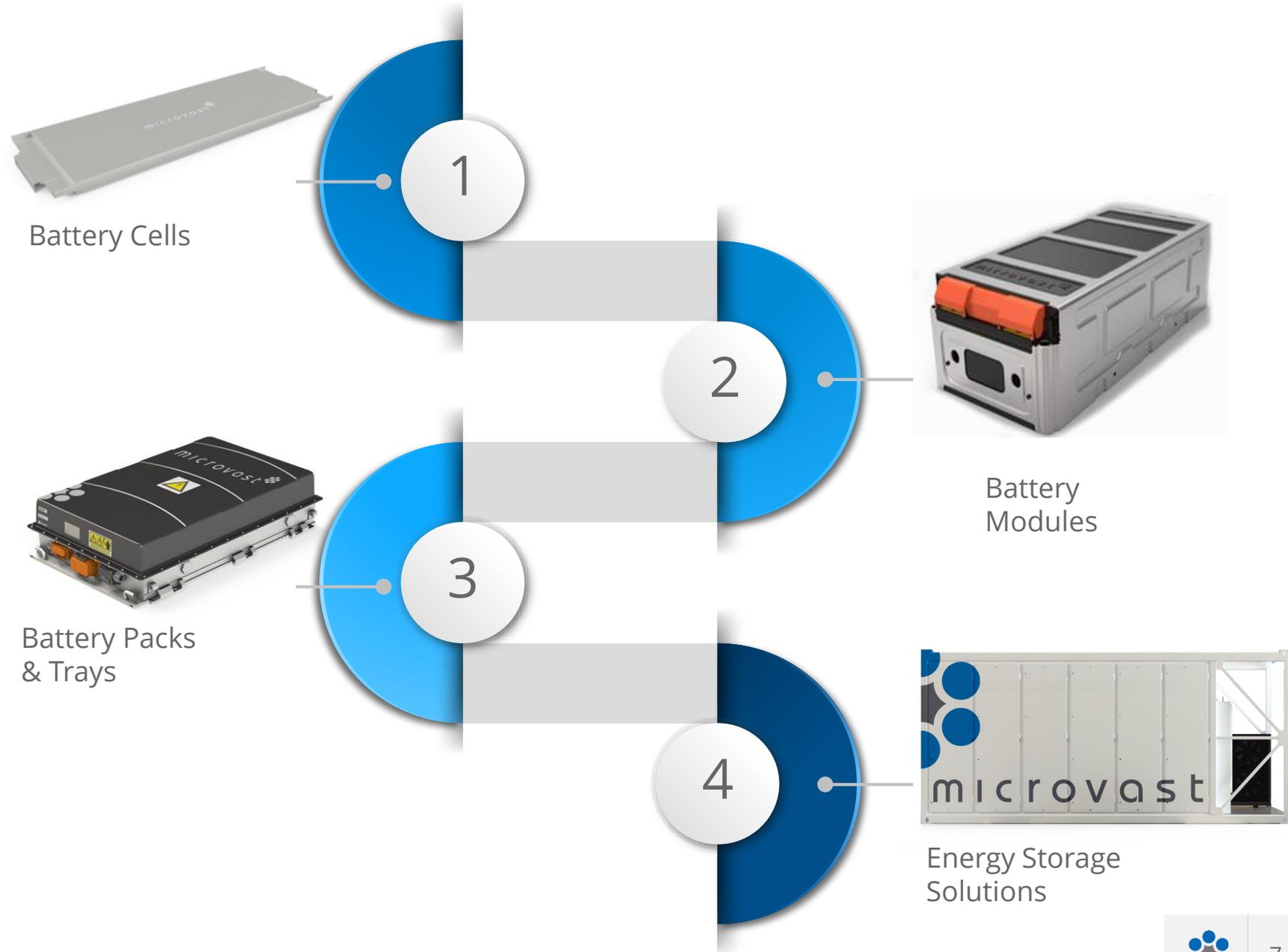
Launched high-density, next-generation NMC battery solutions with battery life matching life of vehicle



# Our Innovation Requires Vertical Integration

We're vertically integrated and maintain control of every aspect of our development process from research to manufacturing, including BMS and controls.

We can create custom battery solutions quickly, with industry-leading energy density, superior safety, ultra-fast charging capabilities, and long lifespans.



# Microvast By The Numbers

Where We Are Today



**17+** Years Experience  
Developing & Manufacturing  
Lithium-Ion Batteries

Global Footprint  
With Presence In

**34+**  
Countries



**3**

Manufacturing  
Plants

**30,000+**

Installed  
Battery Systems

**2,500+**

Employees  
Globally

**626+**

Patents / Patent Applications

**~\$205M**

2022A Revenue

**4GWh**

53.5Ah capacity expansions

**\$486.7M**

Q1 Backlog

# Our 2021 Merger Raising >\$700M Net Proceeds

Let's Look Back & See How We Did

## July 2021

What we said we would do...

- 2GWh of cell and module capacity in the U.S.
- Expand production capacity in China from 3GWh to 7GWh
- High energy 53.5Ah cell would be launched to the market
- Enter ESS market and start to see revenues in 2023
- Commercialize battery materials technologies
- U.S. and Europe would be high growth markets
- 53.5Ah revenues starting in 2022 and having significant momentum going into 2023

What we got done...

- Clarksville, TN is in full construction mode and 2GWh expected to be in production in Q4 this year
- Huzhou phase 3.1 is in ramp-up on its initial 2GWh cell, module and pack production
- 53.5Ah cell deliveries will be made from the phase 3.1 line and over 75% of our backlog is for this cell
- We launched the ME-4300 ESS and it already has contracts for 2023 and 2024 deliveries
- We believe U.S. and Europe will account for about 1/3 of total revenues going forward

What's still a work in progress...

- Commercialization plan for battery materials technologies is underway, investing in expanding polyaramid separator capacity to 10M SQM in 2023
- 53.5Ah revenues will ramp up along with our production, and the SOP schedules for new vehicle launches by our customers, during 2023

What happened?

**We are about 1 year behind on the 2021 revenue plan.**

1. Closing of business combination took longer than anticipated.
2. COVID hit our customers and supply chain hard and delayed their projects



# Seizing The Market Opportunity With Our **Industry-Leading Technologies**

## Global Growth for Our Core Business Segments

### Grow commercial vehicle

Our batteries are designed specifically for the CV market.



Source: BNEF + Sales Estimate

### Grow ESS business in U.S.

Further expand our presence in the U.S. market before expanding overseas.



Source: BNEF: 1H 2023 Energy Storage Market Outlook U.S. March 2023

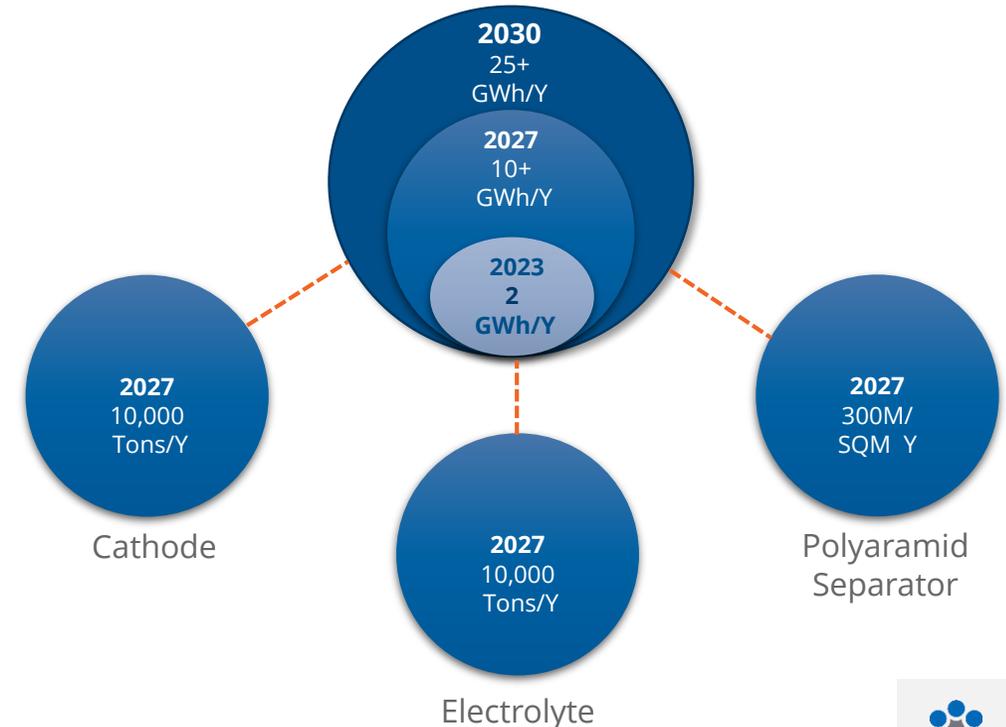
## KEY TAKEAWAY

✓ We have an ongoing commitment to innovation, and we expect to be able to launch new products in 2025-2026.

## What We Plan To Do

Unique opportunity to become U.S.'s home-grown champion in strategically important battery sector

Cell and module technologies and manufacturing



# — Strategic Overview – Commercial Vehicles



**SASCHA KELTERBORN**

CHIEF REVENUE OFFICER

# Commercial Vehicle Numbers



**34**

Countries with CV in operation

**24M**

Est. e-CV TAM in vehicle unit  
accumulated over 2022-2030

**510 GWh**

Est. CV TAM in 2030

**12+**

Years vehicle operating history

**30,000+**

Installed battery systems  
deployed since 2011

**10+**

Market applications being served

Source: BNEF, June 2022 + Sales Estimate

# Commercial Vehicle TAM

Microvast Is Well-Positioned To Capture The Surging Demand In The Global Commercial Vehicle Sector

LCV



E-Bus



MD/HD TRUCK



SPECIALTY CV

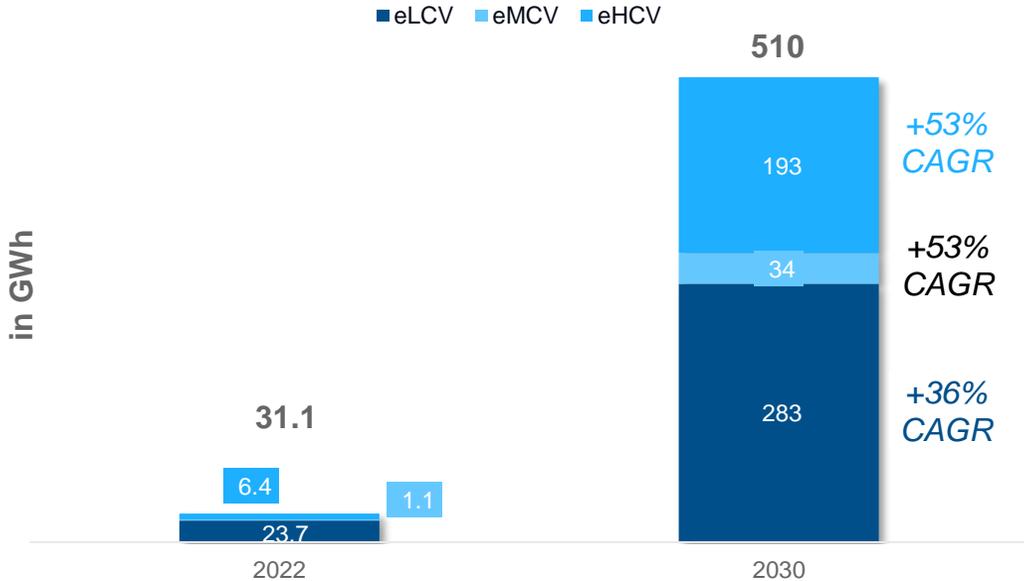
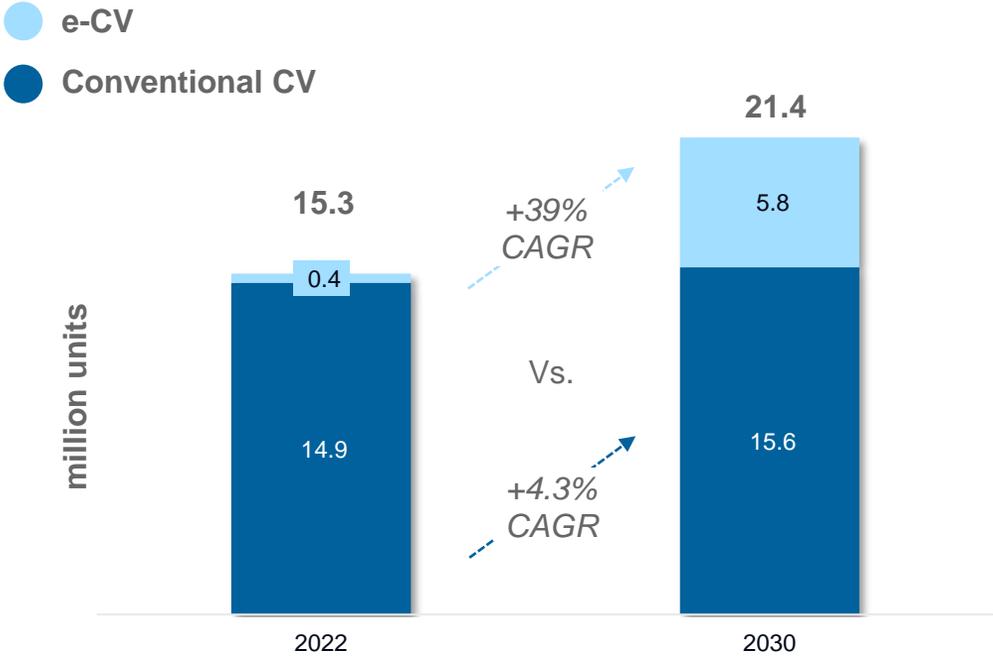


# Commercial Vehicle TAM

EV Adoption Rate In The Commercial Vehicle Market Is Projected To Increase From 2% In 2022 To 30% In 2030

## GLOBAL CV SALES IN UNIT PER YEAR

## GLOBAL VOLUME GROWTH IN GWh



Source: BNEF, June 2022





2023 INVESTOR DAY

# Microvast's High Energy Cell HpCO-53.5Ah

## High Energy Density and Long Range



**High Energy Density of >235 Wh/kg**

+7% vs MpCO-21Ah



**Long Cycle Life**

Over 5,000 cycles at 25°C



**Fast Charging**

Charge to 80% capacity in just 48 minutes at room temperature



**Outstanding Safety and Thermal Management**

Superior safety features with high tolerance for abuse.  
Excellent low temperature performance (@-20°C with around 80% usable energy).



**Lower TCO**

-25% vs MpCO-21Ah



**Great Balance Between  
High Energy Density and Long Cycle Life**

Perfect solution for BEV commercial vehicle applications (LD, MD, HD)

## Applications



E-Bus



LCV Class 1-2



MD/HD Truck Class 3-8



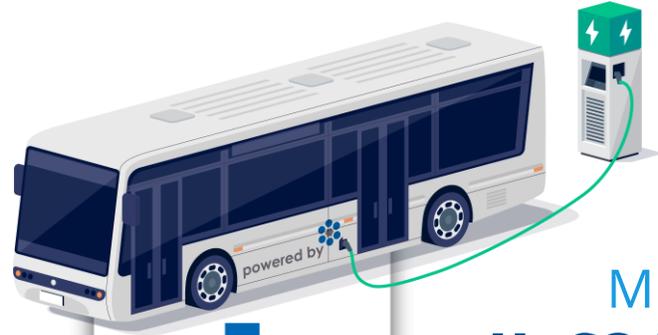
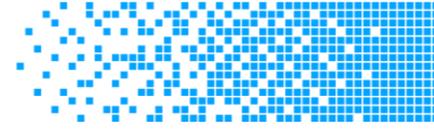
Specialty Vehicles, Off-road

## Key Accounts



# HpCO 53.5Ah Competitive Advantages

Microvast's Industry-Leading Technology



>175 Wh/kg

MINUTES TO  
80% CHARGE

FAST  
CHARGING

30 minutes<sup>2</sup>

CYCLES TO  
80% RETENTION

LONG  
CYCLE  
LIFE

>5,000 cycles<sup>3</sup>

LIFETIME  
THROUGHPUT  
MILEAGE

LONG  
LIFETIME  
MILEAGE

>1,000,000 miles<sup>4</sup>

MICROVAST<sup>1</sup>  
HpCO 53.5Ah I-Pack



## KEY TAKEAWAY

We're delivering a battery cell for buses superior cycle life, operating range, charge time, and energy density.

<sup>1</sup> Representative performance of a Microvast battery if fitted in the same platform, based on Microvast management estimates

<sup>2</sup> Represents time taken to increase State of Charge (SOC) by a given percentage; given variance in measurement by provider, miles per minute of charge is the standardized metric used for comparison

<sup>3</sup> Cycle life is at system level 0-80% SOC

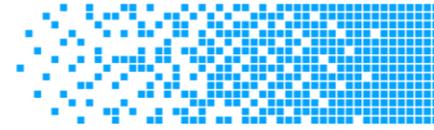
<sup>4</sup> Range calculated with average 175 miles/ cycle



Our total system performance gives significant TCO savings to our customers.

# 52Ah Pack Competitive Advantages

Microvast's Industry-Leading Technology



## MICROVAST<sup>1</sup> HnCO 52Ah pack

MINUTES TO  
80% CHARGE

FASTER  
CHARGING

24 minutes<sup>2</sup>

CYCLES TO  
80% RETENTION

LONG  
CYCLE  
LIFE

>2,500 cycles<sup>3</sup>

LIFETIME  
THROUGHPUT  
MILEAGE

LONG  
LIFETIME  
MILEAGE

>200,000 miles<sup>4</sup>



### KEY TAKEAWAY

We're delivering a battery cell for light duty CV with superior cycle life, charge time, and energy density.

<sup>1</sup> Representative performance of a Microvast battery if fitted in the same platform, based on Microvast management estimates

<sup>2</sup> Represents time taken to increase State of Charge (SOC) by a given percentage; given variance in measurement by provider, miles per minute of charge is the standardized metric used for comparison

<sup>3</sup> Cycle life is at system level 0-80% SOC

<sup>4</sup> Range calculated with average 95 miles/ cycle



Our total system performance gives significant TCO savings to our customers.

# Microvast Global Presence

Multi-year Customer Projects Driving Revenue Growth in EMEA and U.S.

## IVECO



E-Daily (LCV)  
**200+** units ordered  
for 2023

Iveco Bus  
**3,500+** units ordered  
in 2023

249 miles per  
urban cycle

## GAUSSIN



Transport vehicle for  
logistics centers

**300+** units ordered  
and in delivery  
to U.S. & EMEA

## TREPEL AIRPORT EQUIPMENT GMBH MAFI TRANSPORT-SYSTEME GMBH



Airport terminal tractor

**100+** units ordered  
and in delivery  
to U.S. & EMEA

## TBA/Q2 2023



High-performance  
HD truck & trailer

**20+** units ordered  
and in delivery  
in U.S.

# Microvast Global Presence

Operational Proof Points - Long Service History, 24/7 Operation, Challenging Operating Environment



London, UK

**1000+** units

Hybrid diesel bus fleet since 2014

62M miles annually

24/7 operation



The Netherlands

**100** units

Largest 18m full electric bus in Amsterdam region since 2018

24/7 operation

19M miles annually



India\*

**800+** units

Various e-buses since 2019

38M

estimated miles over project lifetime so far



India\*

**700+** units

Subsidiary of Indian Hinduja Group

Various kinds of e-buses since 2019

33M

estimated miles over project lifetime so far

\*In India, for the 1000 sets deployed since 2019, a total of around 48+ million miles accumulated so far.

# Backlog – Latest Position

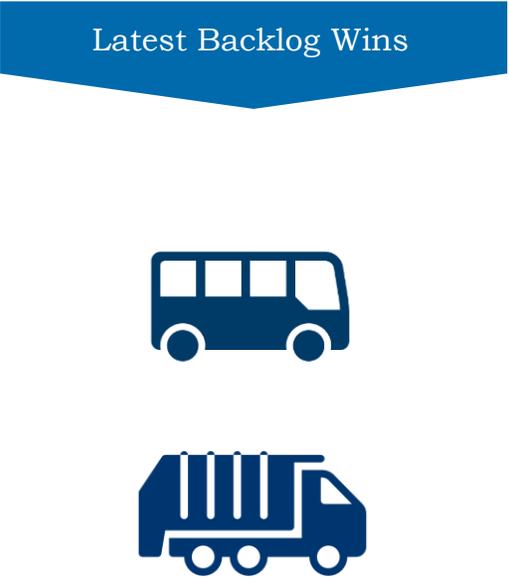
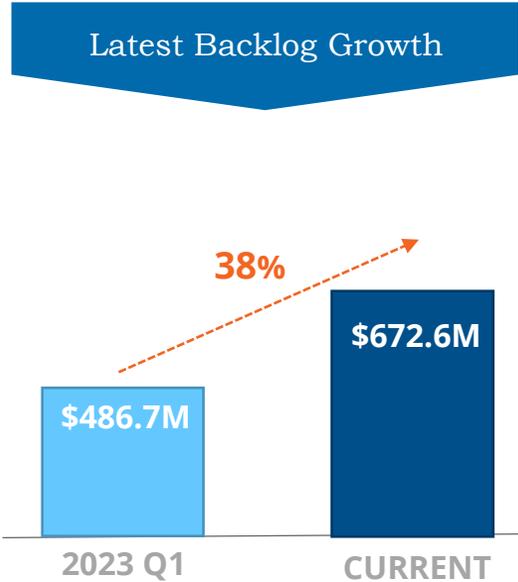
## EMEA Continues Exponential Growth And U.S. Commercial Vehicle Business Receives First P.O. For Clarksville Deliveries

### Key Accounts

### Latest Backlog Growth

### Latest Backlog Wins

Applications



- Expect multi-year engagements with key clients such as Iveco/FPT, REE, Gaussin, etc., to drive EMEA to represent approximately 1/3 of total 2023 revenue
- EMEA has a robust business clientele and has established long-term partnerships to capture the momentum in the fast-growing commercial vehicle sector
- Many of our European customers will also be adopting our 53.5Ah technology for their vehicle offerings in the U.S. market (Made in the U.S.A.)

# — Strategic Overview – Energy Storage



**ZACH WARD**

PRESIDENT, ENERGY DIVISION

# The Energy Numbers



YoY Growth

**68%** global energy storage capacity

Global Energy Storage Capacity added in 2022 **35GWh+**

**TAM**  
**1,432GWh**  
Est. global, cumulative ESS in 2030

**#1 Energy Shifting**  
remains primary use for energy storage

Americas' are forecasted to represent **21%** of annual storage capacity by 2030

 **Annual Storage Projects**

IRA ENERGY STORAGE ITC  
**40%**

utilizing energy shifting expected increase to **73% by 2024**

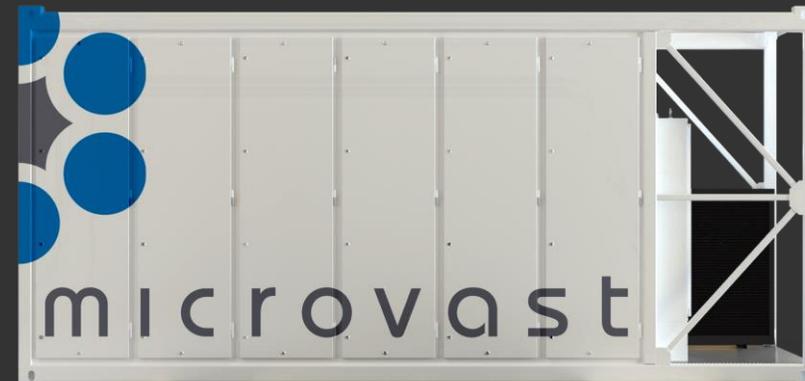
# Microvast Energy

## Energy Storage System (ESS) for Utility-Scale Energy Shifting Applications

- ✓ Launched in 2022 to provide a battery energy storage system
- ✓ Incorporates the proven, high-energy, lithium-ion 53.5Ah NMC cell technology
- ✓ Battery cells and modules are manufactured in Clarksville, TN & Huzhou, China

## FEATURES

- ✓ Higher energy retention than leading competitors
- ✓ Industry-leading energy density at 4.3 MWh
- ✓ BMS developed in U.S. for grid security
- ✓ Easy transportation, installation & maintenance
- ✓ Long battery life, more than 10,000 cycles



## ✓ KEY TAKEAWAY

- Superior energy retention
- High energy density
- Utilizing U.S. owned technology

# Industry-Leading Energy Density



Fewer Containers



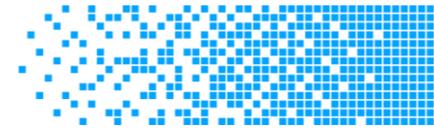
Lower Construction Cost



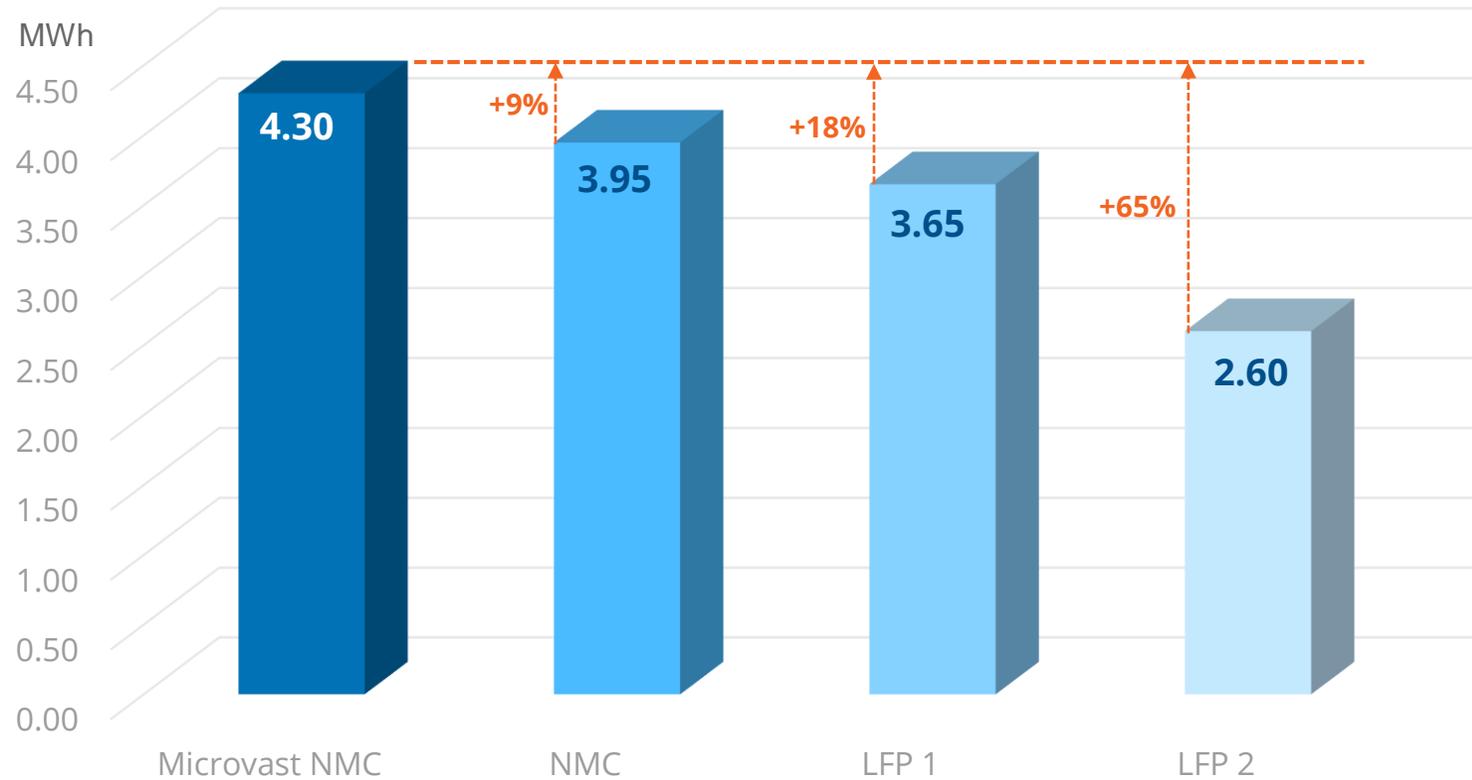
Lower Operations & Maintenance

INVESTOR DAY 2023

## Energy Density



Usable DC Energy of Typical 20 FT ESS Container Design

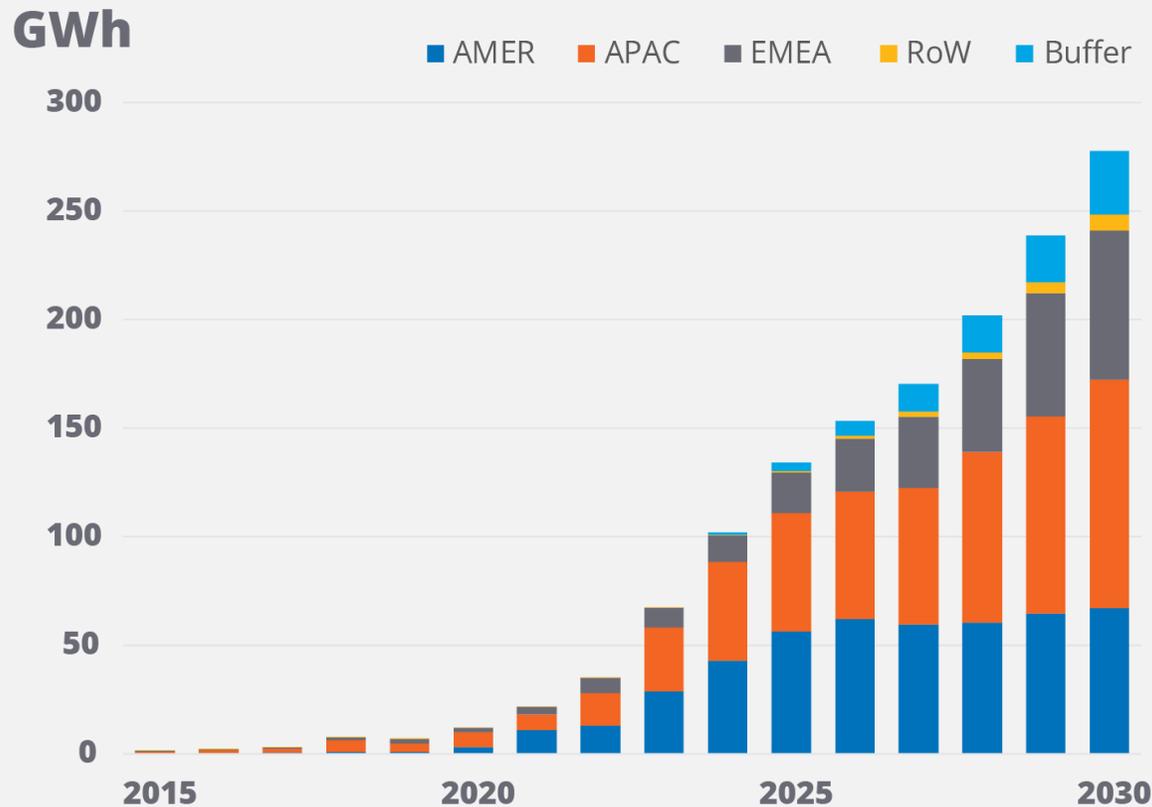


0.25CP/4HR Duration, 1 cycle per day, 100% DOD



# Global Energy Storage TAM

Global Annual Storage Installations By Region Based On Energy Capacity



## ✓ KEY TAKEAWAYS

We believe U.S. and China are leading markets globally

2023 will be an inflection year for the U.S.

Microvast will be expected to add 1.2GWh with its first project

# Energy Storage Total Available Market

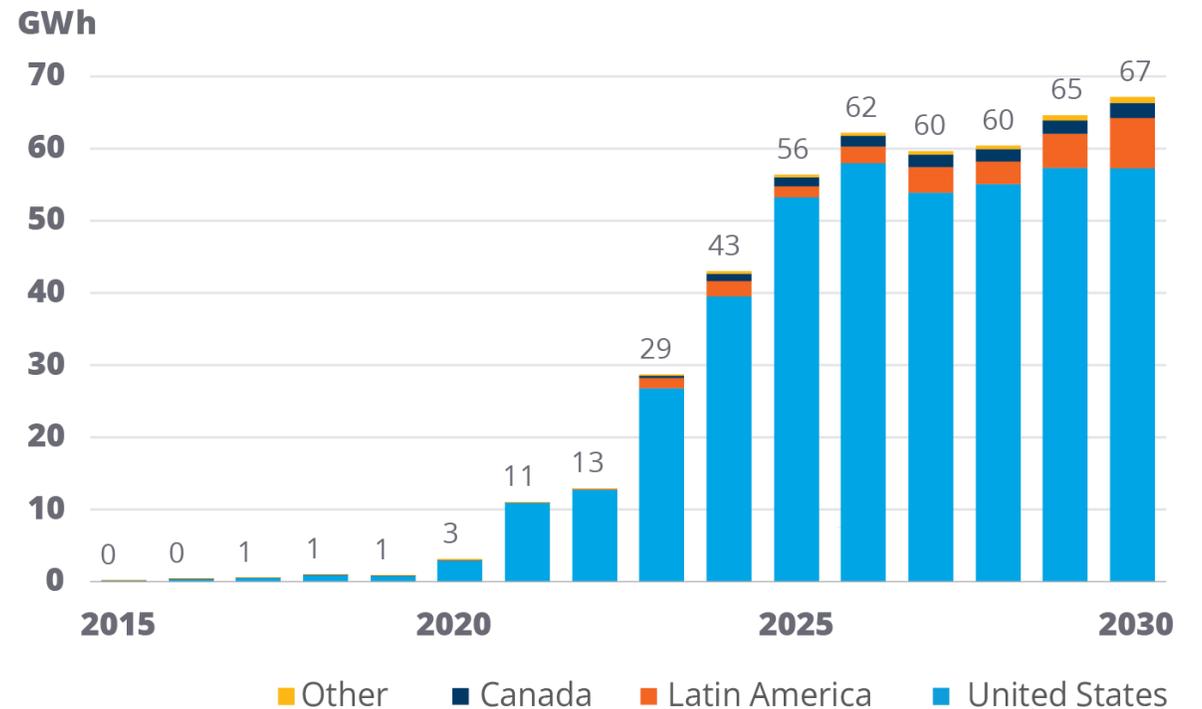
## ✓ KEY TAKEAWAYS

U.S. market in rapid growth phase on its way to adding ~50GWh annually

~70% of this market is for energy shifting applications

The dominant ESS battery solution to meet this demand is Li-ion cell technologies

## THE AMERICAS' ANNUAL ENERGY CAPACITY BY MARKET (EXPECTED)



Source: BNEF: 1H 2023 Energy Storage Market Outlook, March 2023



# Energy Storage Growth Strategy



 **PHASE 3**  
**Expand Globally**  
Expand globally via our customer relationships and bankability. Initial focus on the EMEA and the Asia Pacific markets.

 **PHASE 2**  
**Provide Turn-Key Solutions**  
Offer turn-key construction of battery energy storage plants, significantly increasing revenue and margin per project.

 **PHASE 1**  
**North America Utility-Scale**  
Build a beach head in the U.S. market, providing a superior ESS solution for utility-scale projects focusing on energy shifting applications.

# ESS Deployments



	Size	Location	Description	Delivery
Under Contract	<b>PROJECT #1</b> 300MW/1.2GWh	 United States	 ML-4300 Energy Storage	2023 2024
Awarded	<b>PROJECT #2</b> 100MW/400MWh	 United States	 Energy Storage	2024

NEW

# Why ESS Is A Huge Growth Opportunity...



## Technology

Our ESS solution provides a high density rate, energy retention rate, and round-trip efficiency



## Execution

We already have a full project pipeline through 2025



## U.S. Presence

Manufactured battery cells and modules, a clear financial value to our customers



## Govt. Demand Push

Tremendous government incentives lasting until 2032



## Innovation

New products in development  
17-years experience in development and manufacturing



## The Right Team

We have one of the most experienced teams in the industry, with a proven track record

# — Strategic Overview – Technology



**WENJUAN MATTIS, Ph.D.**

CHIEF TECHNOLOGY OFFICER

# Technology Highlights

What Sets Us Apart



# 3

Continents to maximize the talent pool

# VERTICAL INTEGRATION

Materials to Pack IP ownership

# 626/463

Patent Applications/ Granted Patents

# 780+

Researchers and engineers

# \$10M

Awarded since 2017 research funding from U.S. and German Government

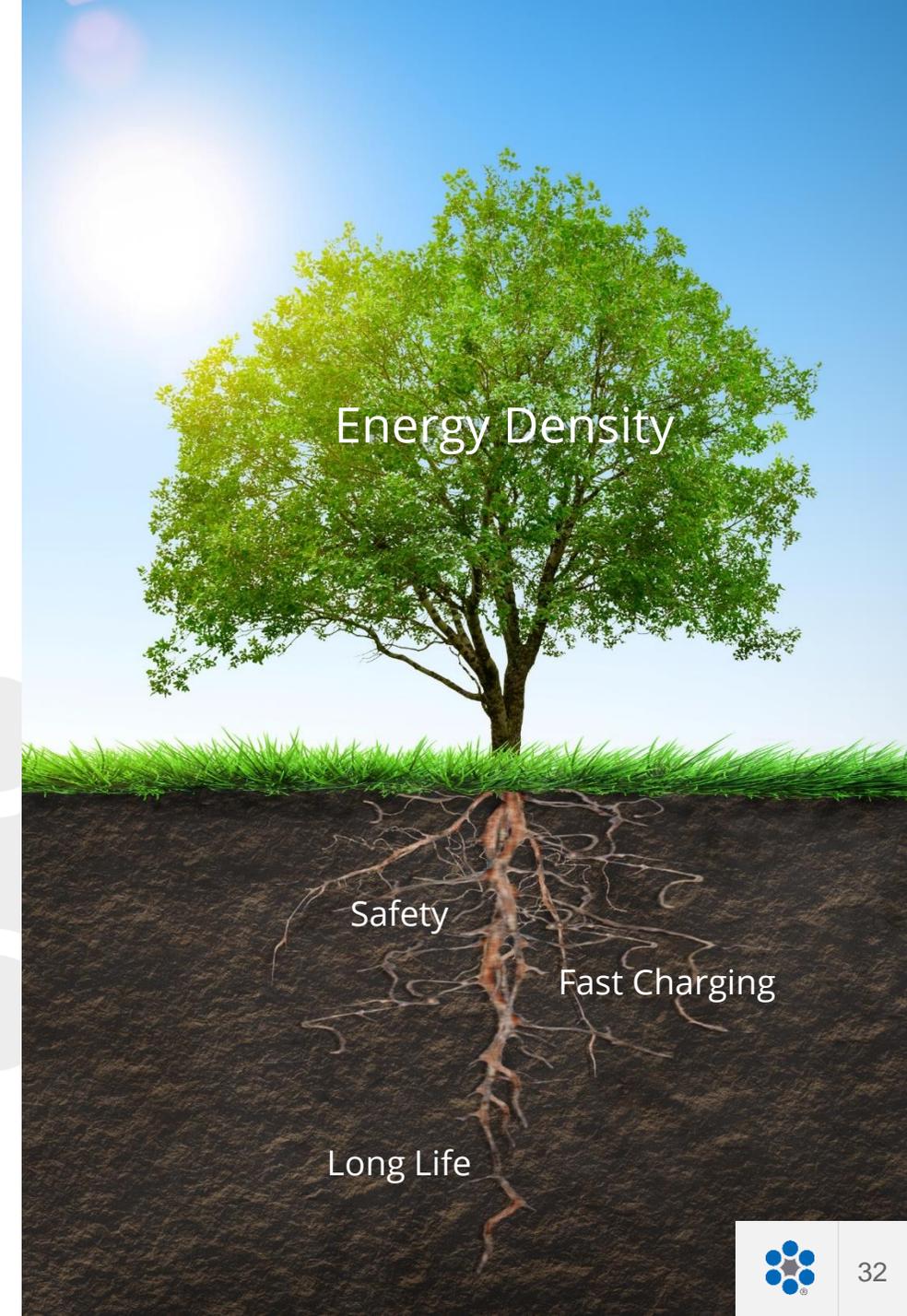
# 17+

Years of experience in the research and development of key materials, cells, module, pack, BMS, etc.

# FORWARD THINKING. POWERING NOW.™

**Innovating Superior Lithium-ion Battery  
Solutions To Power A More Sustainable Future**

- ✓ Delivering advanced battery technology for high performance
- ✓ Delivering distinct competitive advantages to customers
- ✓ Accelerating the adoption of clean energy in transportation and energy storage markets



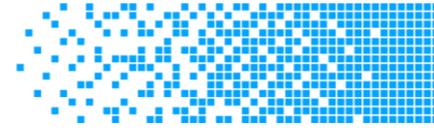
Energy Density

Safety

Fast Charging

Long Life

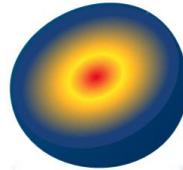
# Technology Portfolio



## Proprietary Technology Across All Battery Components

### Gradient Cathode

Enables the precise distribution of elements (e.g. Cobalt) across the cathode particles—boosts energy density and reduces cost



### Non-Flammable Electrolyte

Virtually eliminates the risk of battery fires, addressing a major industry challenge



### Aramid Separator

Higher thermal stability than charged cathode material; 2x the temperature resistance of traditional poly-ethylene separators, enhancing safety and charging time



## Broad Portfolio of Cell Chemistries Suited to Specific Applications

### LTO

Lithium Titanate  
( $\text{Li}_4\text{Ti}_5\text{O}_{12}$ )

Ultra-fast charging, Ultra long cycle life, Safest LIB chemistry

### LFP

Lithium Ferrophosphate  
( $\text{LiFePO}_4$ )

Lowest cost  
Good cycle life

### NMC-1

Lithium Nickel-Manganese-Cobalt Oxide ( $\text{LiNi}_x\text{Mn}_y\text{Co}_z\text{O}_2$ )

Ultra-fast charging  
Long cycle life

### NMC-2

Lithium Nickel-Manganese-Cobalt Oxide ( $\text{LiNi}_x\text{Mn}_y\text{Co}_z\text{O}_2$ )

Highest energy density  
Fast charging  
Long cycle life

## Unique Capabilities Down to the Cell Level Enables Tailored Solutions

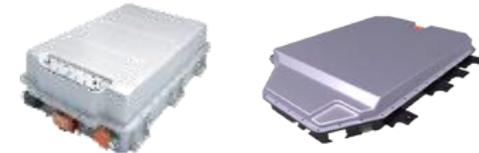
### Cells



### Modules



### Packs



Proven Technology Supported by Extensive 3<sup>rd</sup> Party Testing and Validation



220-240 Wh/kg  
Extreme Fast Charge (XFC) Cells



220 Wh/kg High Power Cells  
270 Wh/kg High Energy Density Cells



HnCO-52Ah cells



18 kWh LpTO Pack



200 Wh/kg Power Cells & 270 Wh/kg High Energy Density cells



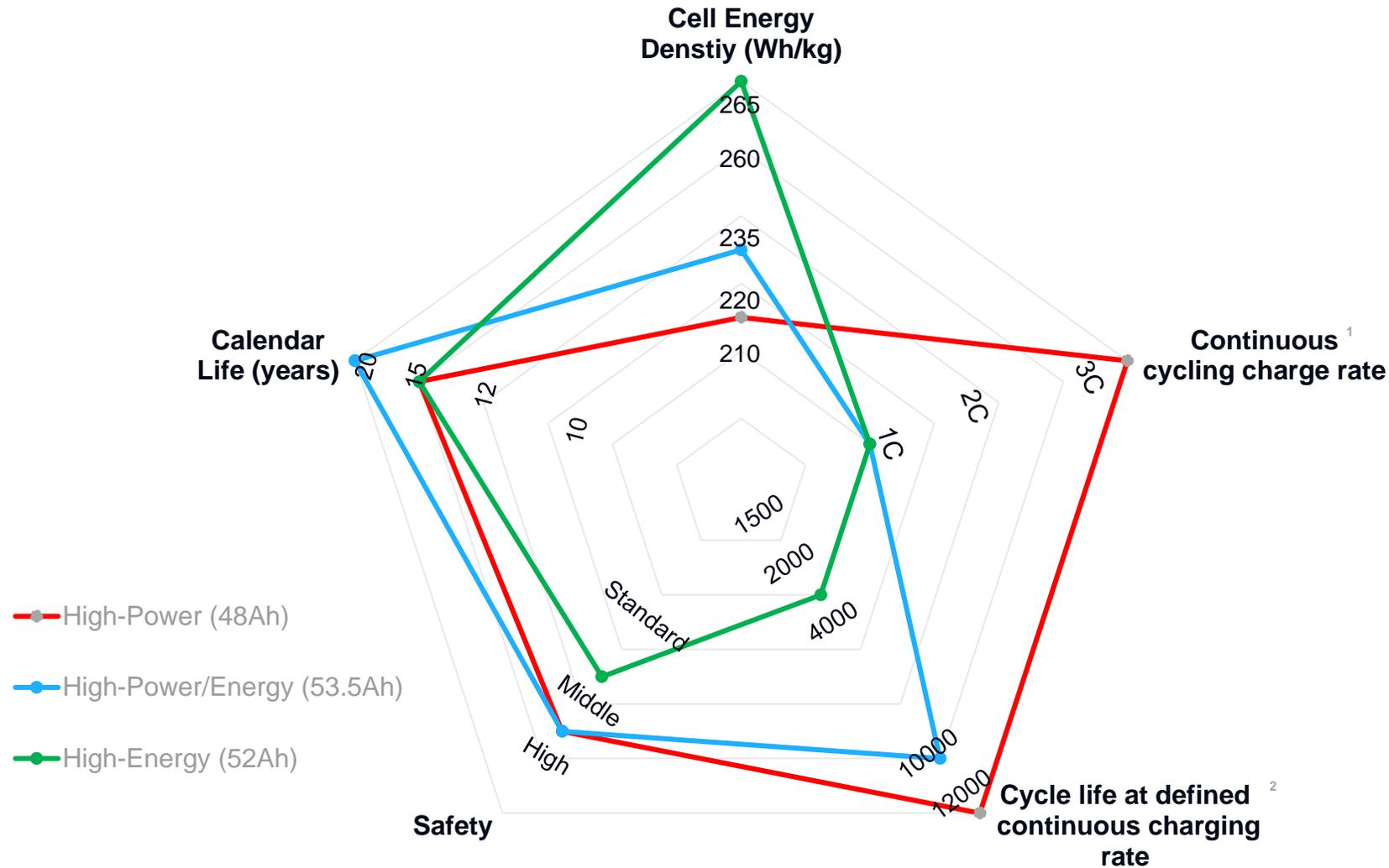


# Industry-Leading Technology

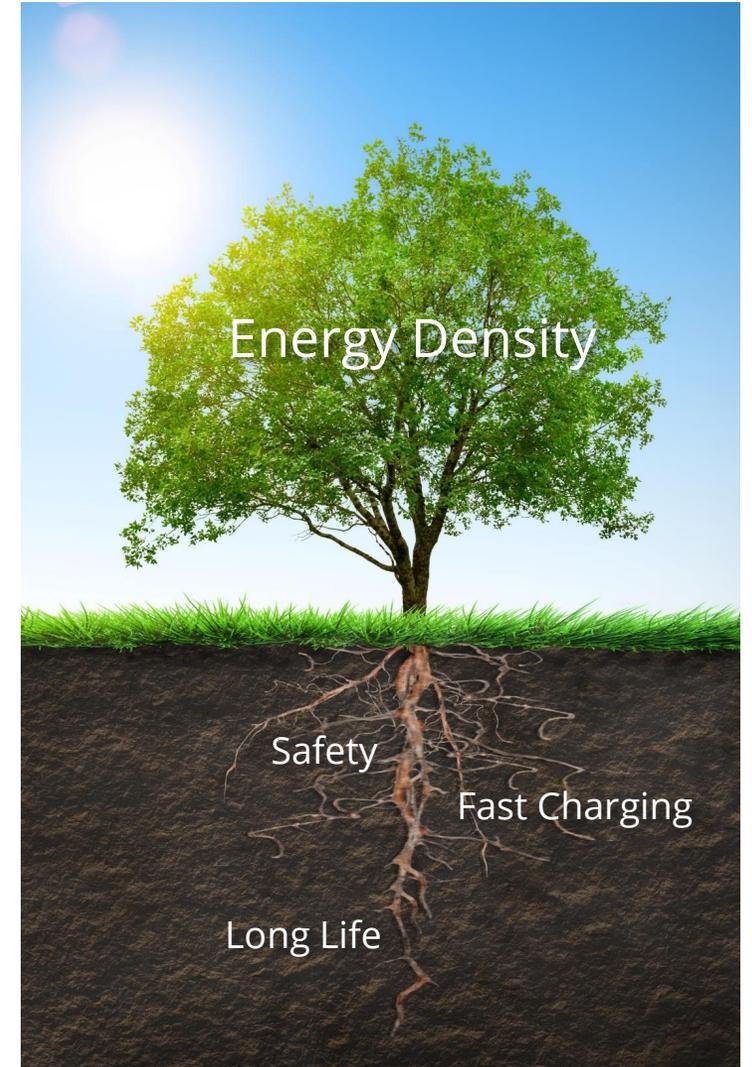
	Representative Applications	Energy Density	Life Cycles	Charging Time (full charge)
Currently in Production	<ul style="list-style-type: none"> <li>Ultra Fast Charge (LTO) Introduced in 2011</li> <li>Buses</li> <li>Mining Trucks</li> </ul>	95 Wh/kg	20,000	10 min
	<ul style="list-style-type: none"> <li>High Power (NMC-1) Introduced in 2016</li> <li>Commercial Vehicles</li> <li>Buses</li> </ul>	210 Wh/kg	4,000	15 min
	<ul style="list-style-type: none"> <li>High Energy Density (NMC-2) Introduced in 2019</li> <li>Commercial Vehicles</li> <li>Passenger Vehicles</li> </ul>	265 Wh/kg	3,300	30 min
Upcoming	<ul style="list-style-type: none"> <li>HPHE Density (NMC-3) Introduced in 2019</li> <li>Commercial Vehicles</li> <li>Passenger Vehicles</li> <li>ESS</li> </ul>	235 Wh/kg	5,000	30 min
	<ul style="list-style-type: none"> <li>High Energy Density Target Cell (B Sample)</li> <li>Commercial Vehicles</li> <li>Passenger Vehicles</li> <li>ESS</li> </ul>	300+ Wh/kg	4,000	45 min



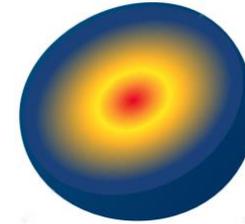
# Technical Analysis of HP, HPHE and HE NMC Cell Products



1. Measured at 0-100% SoC, 25°C  
 2. Charging and discharging at 1C, 25°C until max battery capacity is 80%  
 Source: MV datapoints provided by MV Technology team.



# Innovate With Focus On Energy Density & Safety Gradient Cathode



## Impact on performance

■ At par with industry   ■ Among best in class   ■ Industry leader

**Energy density**   ■   Increases Usable Lithium percentage in Cathode, directly increasing energy density

**Cycle life**   ■   Negligible effect (longer cycle life due to the lower surface Ni content)  
Higher Nickel bulk content in the cathode

**Charge rate**   ■   Negligible effect

**Safety**   ■   Increases risk of thermal instability; gradient cathode technology aims to increase Nickel content at the vicinity of core of the particle to maximize safety

### Our safety track record

First applications of high-nickel cathodes have led to safety incidences (e.g., 3 spontaneous combustions of the GAC Aion S). So far, MV's has recorded no similar safety incidences with their gradient cathode technology

### ✓ KEY TAKEAWAY

Our gradient cathode helps achieve "best in class" energy density while maintaining safety (ANL – NMC □ FCG).

Source: Expert interviews, academic research, press search

# Aramid separator enables superior safety performance compared to other separators

The separator **prevents short circuits** during battery charge-discharging. Improving battery performance, as it enables **lower inner resistance, higher robustness against thermal runaway (safety) and higher volume-share of cathode and anode materials** (to a limited extend)

## Impact on performance

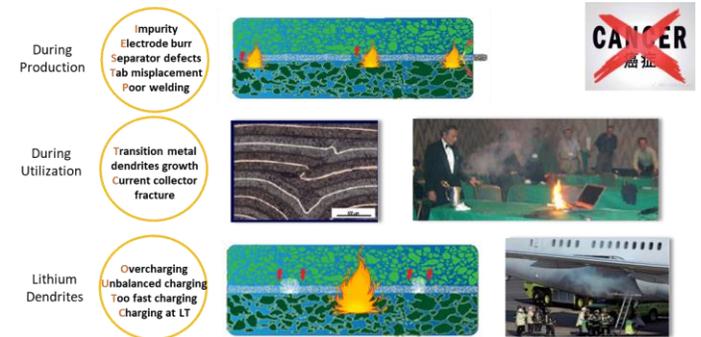
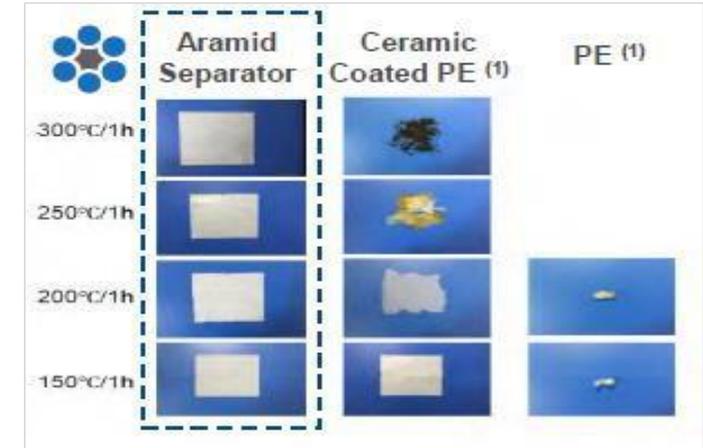


**Energy density** *Enabler* An aramid separator enables usage of less inactive material, resulting in a **thinner, lighter component** for potentially slightly **higher energy density**<sup>1</sup>

**Cycle life** *N/A* A stronger separator can **keep a battery safe throughout life cycle** (however, negligible direct effect)

**Charge rate**  A thinner separator **may decrease internal resistance**, improving charging speed

**Safety**  Higher thermal stability of separator **prevents short circuits at higher temperatures**, even with increased energy density



1. Based on scientific literature and expert interviews, increase of energy density in negligible range possible (i.e. 1-10%)  
Source: Expert interviews, academic research, press search

# — Strategic Overview – Manufacturing



## SHANE SMITH

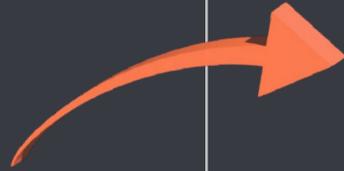
CHIEF OPERATING OFFICER

# Operation Numbers



3

Continents to be close to our customers



3

Manufacturing plants

7GWh

Anticipated total available capacity by Q4 2023

2,500+

Employees globally

>70%

New production line expected utilization

17+

Years of experience in the development & manufacturing of lithium-ion batteries

# Our Locations

Denver, CO  
2022



London, UK  
2014



Huzhou, China  
2008

Orlando, FL  
2014

Clarksville, TN  
2021

Berlin, Germany  
2021



**HEADQUARTERS**  
Stafford, TX  
2006

 Operation Via Green Energy Supply

- Manufacturing Plant
- Sales/Service Subsidiary
- R&D Center
- Energy Division Technology & Testing Center

# Production Capacity Expansions



## Completed Huzhou plant expansion

- ✓ Added 2.0 GWh per annum of battery cells, modules, and pack manufacturing capacity – **ramping up now!**
- ✓ New building supports up to 12 GWh per annum (additional utility infrastructure required)
- ✓ New capacity is being filled by growing backlog in 2023
- ✓ Long-term supply agreements for key materials are in place; excellent, long-standing supplier relationships



## Clarksville, TN under renovation; production Q4 2023

- ✓ Adding 2.0 GWh per annum of battery cells and modules manufacturing capacity (utility infrastructure will support some of the 4 GWh per year capacity)
- ✓ Expected production begins late Q4 2023 using the same equipment
- ✓ Expected new capacity will have high levels of utilization in 2024

Leveraging our global supply chain for raw materials

# Huzhou, China

## Battery Manufacturing Plant Expansion





**Clarksville, TN**

Mixing Building

# — Strategic Overview – Financials

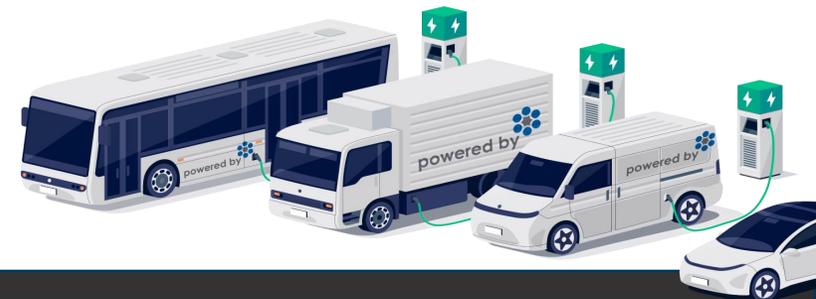


**CRAIG WEBSTER**

CHIEF FINANCIAL OFFICER

# Financial Highlights

2023 Inflection Year – Foundations In Place For Our Fast Growth Phase



**50+%**  
Revenue CAGR  
2022A to 2027E

GM Expansion  
**20%+**  
2027 Target

**13-15%**  
Adj. OPEX (% of revenue)  
2027 Target

Q1 Backlog  
**\$486.7M**

**>70%**  
Utilization  
Clarksville Phase 1A  
2024 anticipated

IRA credit potential  
**\$80M**  
on each 2GWh capacity in U.S.



**\$0** Leverage  
on U.S. asset base

# Our Capacity Expansions

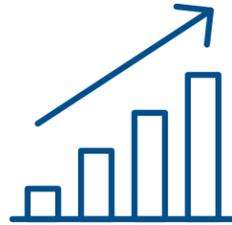
Fully Funded Expansions Get Us To \$1BN+ Top Line Potential

## Huzhou 3.1



**2GWh**

Fully automated cell, module and pack production for 53.5Ah cell



**\$1BN**  
REVENUE POTENTIAL

Huzhou ramping up production

**NO CAPEX**

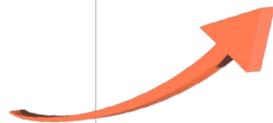
until we need to add more capacity

## Clarksville 1A



**2GWh**

Fully automated cell and module production for the 53.5Ah cell - using same production equipment as Huzhou 3.1



Phase 1A capacity in Clarksville has potential

of **\$80M**<sup>PA</sup>  
**\$45X IRA credits**

# 53.5Ah Expansions – Huzhou 3.1

Capacity Expansion Unlocks Significant Incremental Revenue

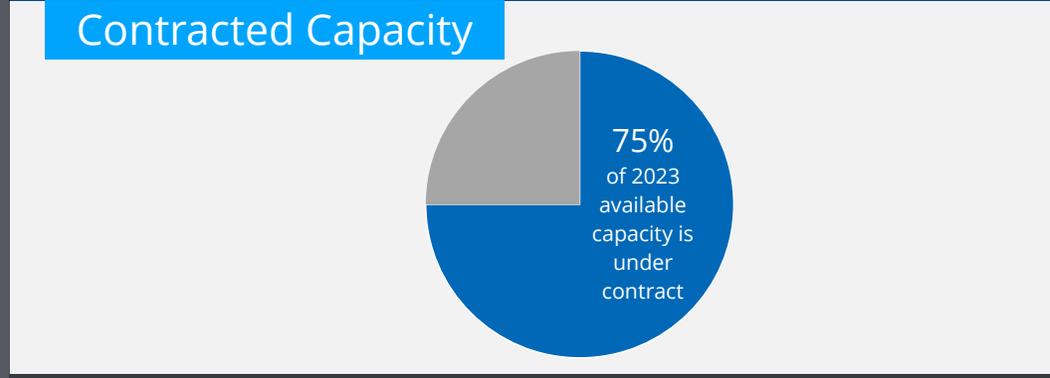
Double-digit margin potential, de-risked by contracted pipeline with entrenched OEM and ESS customers.



**2GWh**  
of additional cell, module and pack capacity trial production in Q1 2023

✓  
CapEx investment complete

**53.5 Ah**  
Cell technology adoption underway



**Key Customers**

GAUSSIN IVECO propel MAFI KALMAR  
DONGFENG KING LONG JBM Group PROTON ASHOK LEYLAND

**Note:** Financials presented above reflect plant level only and assume (i) full 2GWh capacity is available, (ii) market ASP for CV and ESS battery solutions (iii) Opex from China operations.

# 53.5Ah Expansions – Clarksville 1A

Capacity Expansion Unlocks Significant Incremental Revenue

Double-digit margin potential, de-risked by contracted pipeline with entrenched OEM and ESS customers.

\$  
500M

New Revenue Potential

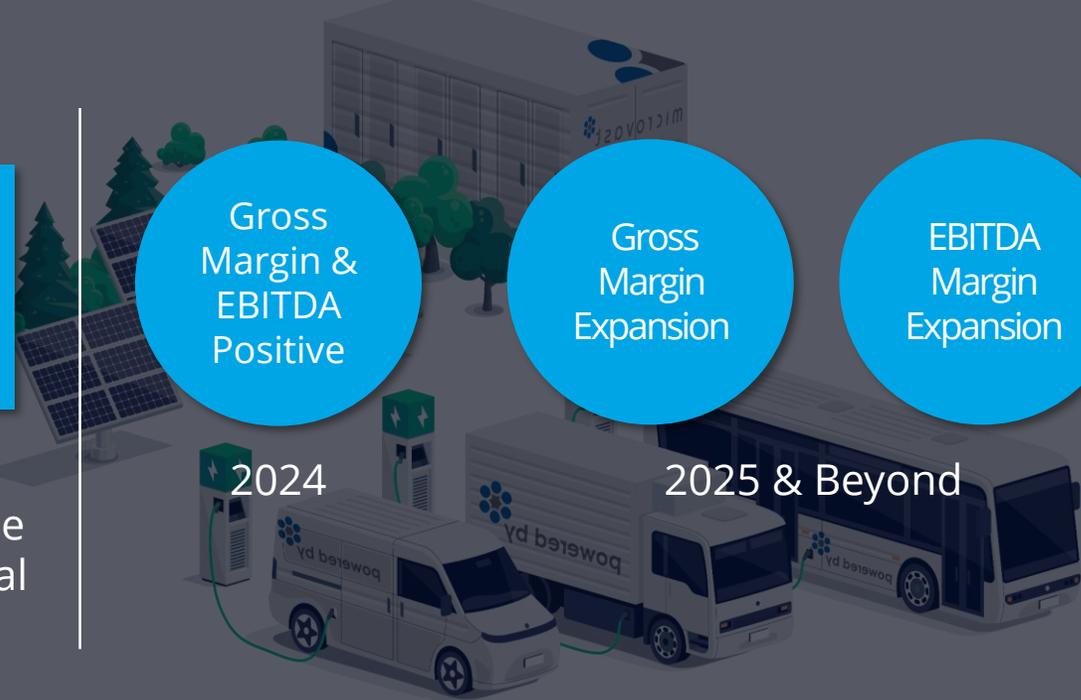
Gross Margin & EBITDA Positive

2024

Gross Margin Expansion

2025 & Beyond

EBITDA Margin Expansion

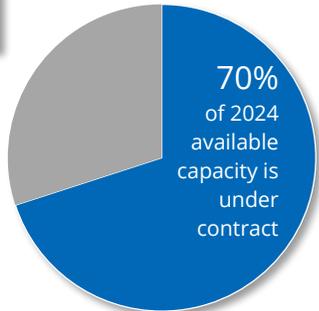


**2GWh**  
of additional cell, module and pack capacity trial production in Q1 2023

✓  
CapEx investment funded

**53.5 Ah**  
Cell Technology Adoption Underway

Pipeline as a % of Anticipated 2024 Revenues (Phase 1A)



## Key Customers



**Note:** Financials presented above reflect plant level only and assume (i) full 2GWh is available, (ii) market ASP for CV and ESS battery solutions and (iii) Opex from Clarksville operations





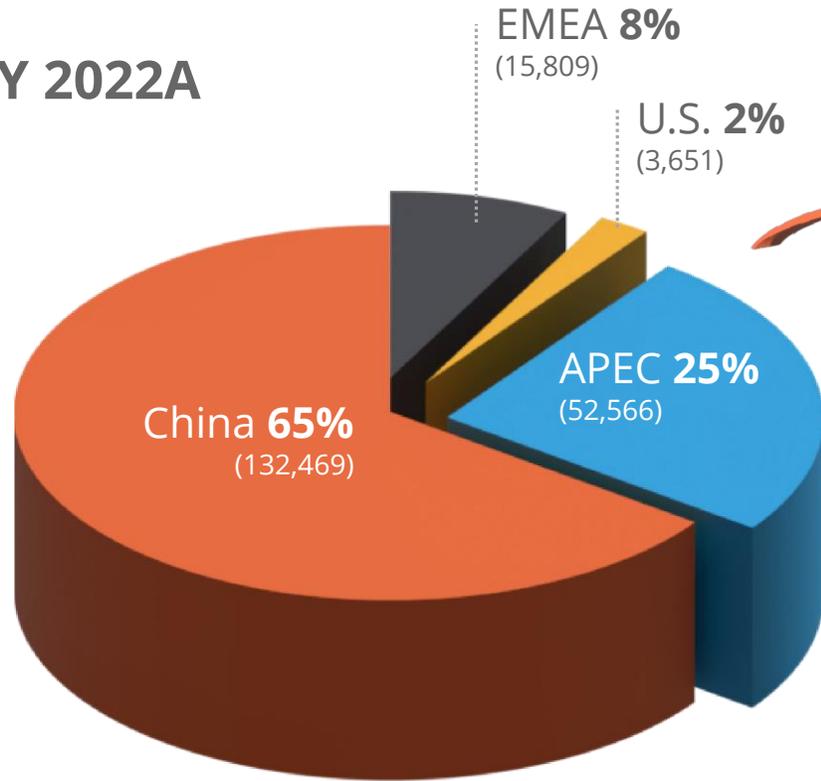
# Geographic Diversification

U.S. And Europe Becoming Dominant Markets

Clarksville, TN



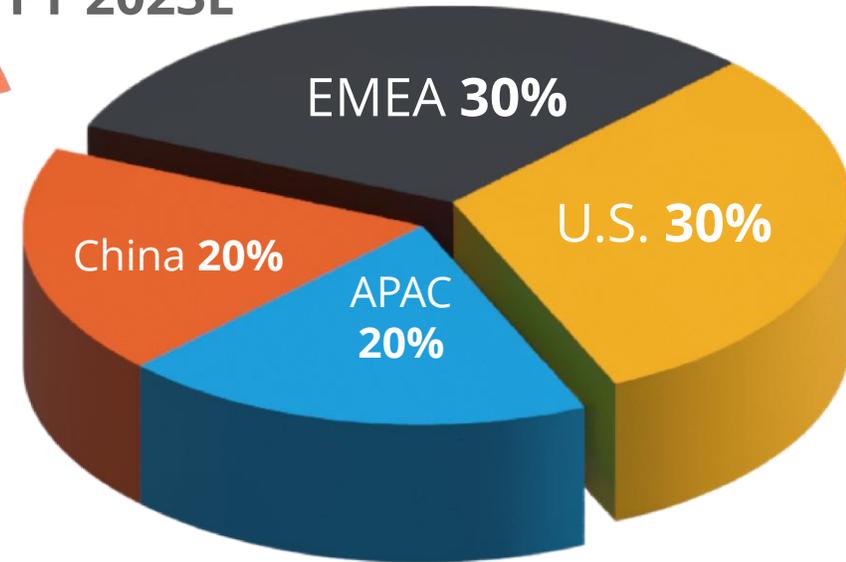
FY 2022A



**\$204.5M**

70-80%  
YoY  
Growth

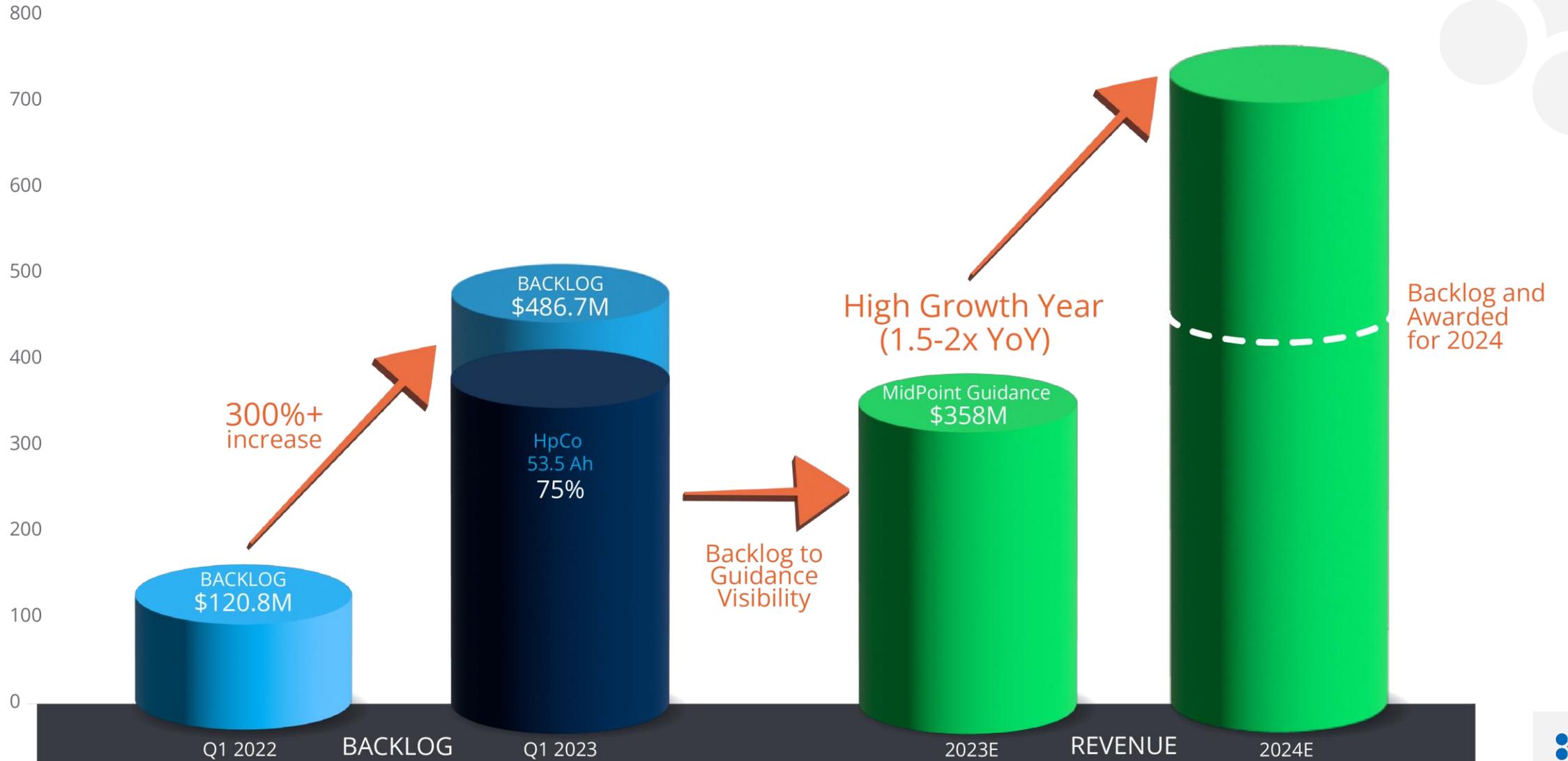
FY 2023E



**\$358M**  
(midpoint)

# Revenue Visibility

Backlog Makes Potential A Reality



# Funding More Capacity

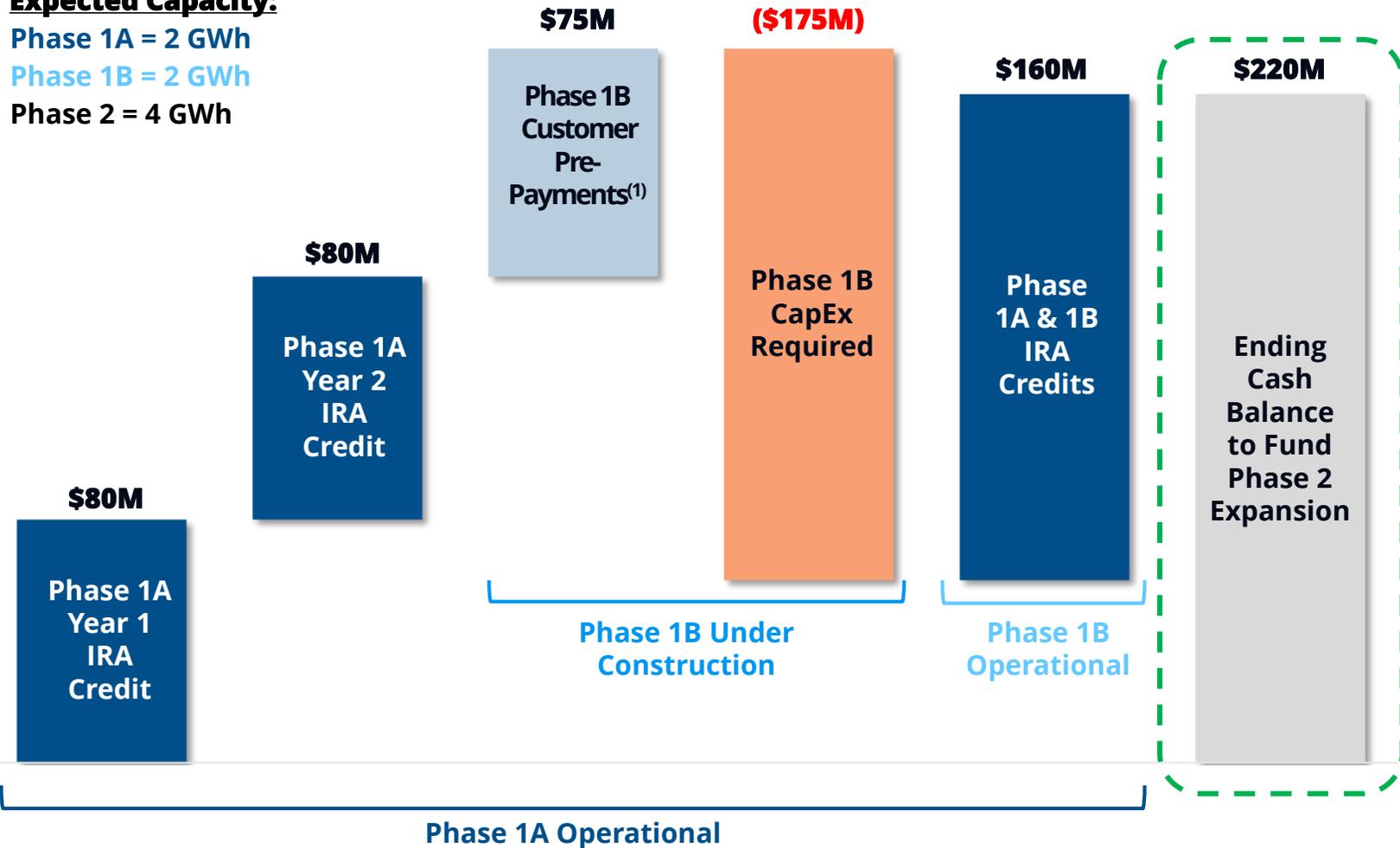
## Clarksville Expansions Are Self-Funding

**Expected Capacity:**

Phase 1A = 2 GWh

Phase 1B = 2 GWh

Phase 2 = 4 GWh



- ✓ **Golden Rule:** We only add more capacity when we have customer orders in place
- ✓ Based on backlog, we **expect 2024 utilization for Phase 1A to be high**
- ✓ **Clarksville (up to 8GWh)** is self-funding due to IRA credits
- ✓ We have the **option to monetize the IRA early** which provides funding for future expansions
- ✓ Customer down payments provide **access to cash**

**Note:** Funding bridge does not reflect additional positive cash flows generated from Clarksville facility.  
 (1) Management estimates 40-50% manufacturing capacity would generate prepayments from customers.

# Operating Leverage & Margins

Multi-year Fast Growth From An Operating Base That Is Already At Scale

## ✓ KEY TAKEAWAYS

Scalable business model

Backlog growth is underpinning fast growth phase

Our R&D spend today is for our future product innovation

**PROOF POINT:** We expect to add 4GWh capacity in 2023, revenue growth est. 70-80%, and adj. OPEX est. to increase approx. 20-30%

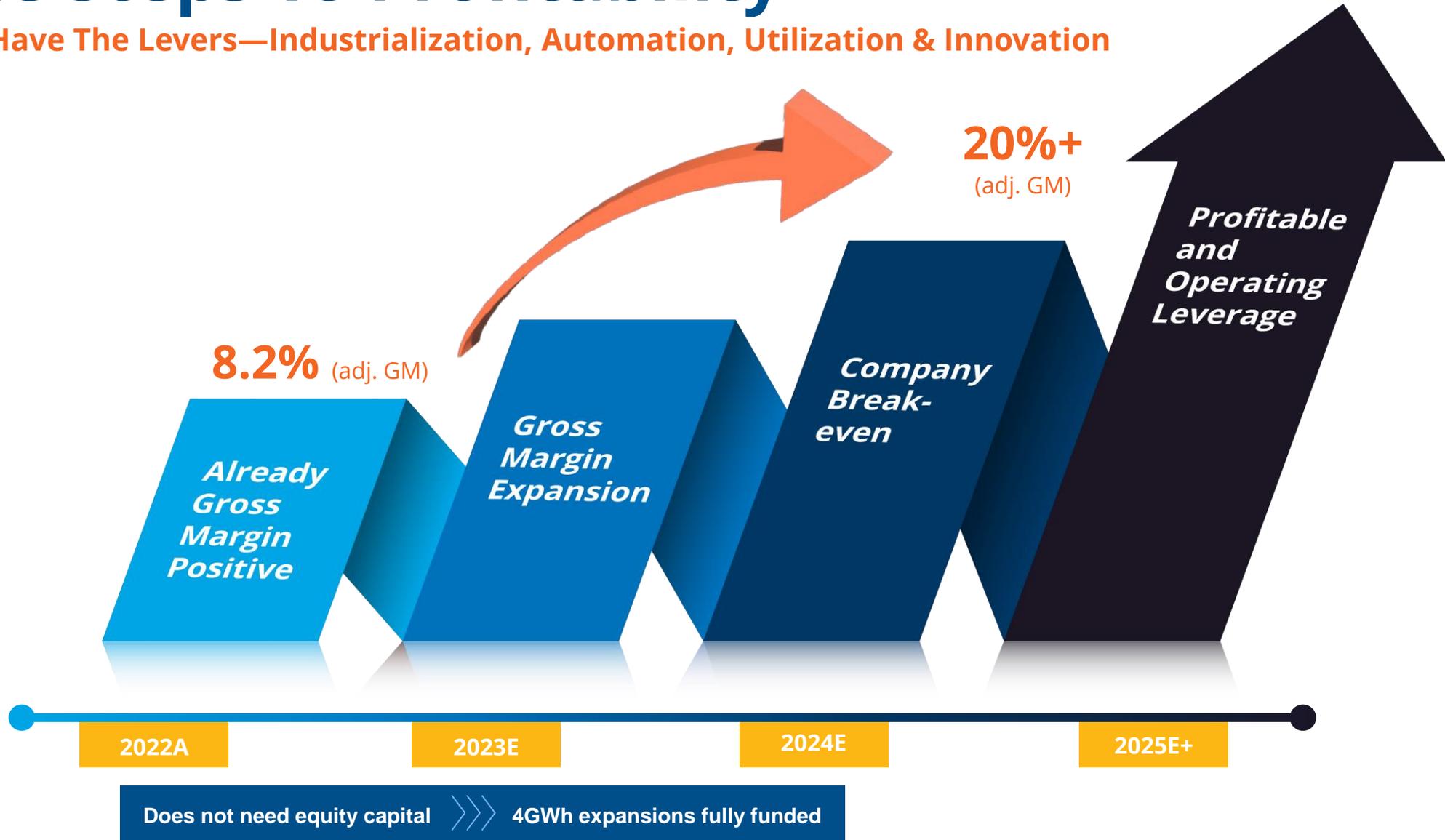


Fully funded 4GWh expansion

Multiple funding sources

# The Steps To Profitability

We Have The Levers—Industrialization, Automation, Utilization & Innovation



# Financials – Summing it Up...



## Growth

The fast revenue growth is kicking in, and growing backlog tells you the 53.5Ah is a winner



## Capex

We got Huzhou done, bringing 2GWh online and Clarksville is targeted for Q4



## Funding

We don't need any equity to bring this capacity online and have plenty of financing options



## Diversification

The backlog, which is mostly from U.S. and European customers, is giving us a solid base on which to expand our business in these regions



## Scale

We can scale the business as we have a global foundation in place and can add capacity at pace, which improves margins

# Key Takeaways



## Yang Wu

FOUNDER, CHIEF EXECUTIVE OFFICER, PRESIDENT

# Business Strategy Alignment

## ✓ KEY TAKEAWAY

We're entering a **multi-year, high growth phase supported by the sought-after HpCO 53.5Ah cell**, new technology, increased capacity, and new markets.

## ✓ KEY TAKEAWAY

We're **industrializing at scale, with improved automation and utilization** to improve financial performance.

## ✓ KEY TAKEAWAY

The **HpCO 53.5Ah cell provides many competitive advantages**, with its cycle life, fast charge capabilities and energy density providing TCO benefits to our customers.

## ✓ KEY TAKEAWAY

2023 is a critical execution year as it creates the **foundations to add significantly higher scale** and which supports expansion plans for our battery component technologies.

## ✓ KEY TAKEAWAY

We're **focusing our capital in the U.S.** as our technologies can help build-up a domestic battery industry.





microvast<sup>®</sup> 

Forward Thinking. Powering Now.™

powered by 

2023  
INVESTOR  
DAY

Q&A

