UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

SCHEDULE 14A
(Rule 14a-101)
INFORMATION REQUIRED IN PROXY STATEMENT
SCHEDULE 14A INFORMATION

Proxy Statement Pursuant to Section 14(a) of the
Securities Exchange Act of 1934

Filed by the Registrant ☒
Filed by a Party other than the Registrant ☐

Check the appropriate box:

☐ Preliminary Proxy Statement

☐ Confidential, For Use of the Commission Only (as permitted by Rule 14a-6(e)(2))

☐ Definitive Proxy Statement

☐ Definitive Additional Materials

☒ Soliciting Material Pursuant to § 240.14a-12

B. RILEY PRINCIPAL MERGER CORP. II
(Name of Registrant as Specified In Its Charter)

(Name of Person(s) Filing Proxy Statement, if Other Than the Registrant)

Payment of Filing Fee (Check the appropriate box):

☒ No fee required.

☐ Fee computed on table below per Exchange Act Rules 14a-6(i)(1) and 0-11.

(1) Title of each class of securities to which transaction applies:

(2) Aggregate number of securities to which transaction applies:

(3) Per unit price or other underlying value of transaction computed pursuant to Exchange Act Rule 0-11 (set forth the amount on which the filing fee is calculated and state how it was determined):

(4) Proposed maximum aggregate value of transaction:

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☐ Fee paid previously with preliminary materials.

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(2) Form, Schedule or Registration Statement No.:

(3) Filing Party:

(4) Date Filed:

Below is a copy of the investor presentation used by B. Riley Principal Merger Corp. II (the "Company") and Eos Energy Storage LLC ("Eos") at an analyst day held on October 20, 2020, in connection with their proposed business combination, which is being filed herewith as soliciting material.

Eos Energy Storage

Analyst Day Presentation

October 2020

Eos. Positively ingenious.

eos

Disclaimer

This presentation does not purport to contain all of the information that may be required to evaluate a possible voting or investment decision with respect to B. Riley Principal Merger Corp. II ("BRPM II"). The recipient agrees and acknowledges that this presentation is not intended to form the basis of any voting or investment decision by the recipient and does not constitute investment, tax or legal advice. No representation or warranty, express or implied, is or will be given by BRPM II or Eos Energy Storage LLC ("Eos") or any of their respective affiliates, directors, officers, employees or advisers or any other person as to the accuracy or completeness of the information in this presentation or any other written, oral or other communications transmitted or otherwise made available to any party in the course of its evaluation of a possible transaction between BRPM II and Eos (the "Transaction"), and no responsibility or liability whatsoever is accepted for the accuracy or sufficiency thereof or for any errors, omissions or misstatements, negligent or otherwise relating thereto. The recipient also acknowledges and agrees that the information contained in this presentation is preliminary in nature and is subject to change, and any such changes may be material. BRPM II and Eos disclaim any duty to update the information contained in this presentation. BRPM II and Eos have executed a letter of intent ("LOI") with respect to the proposed Transaction. The proposed Transaction is subject to, among other things, the approval by BRPM II's shareholders, satisfaction of the conditions stated in the LOI and other customary closing conditions. Accordingly, there can be no assurance that a definitive agreement will be entered into or that the proposed Transaction will be consummated.

Important Information About the Business Combination and Where to Find It
BRPM II, a publicly traded special purpose acquisition company, and Eos have entered into a definitive merger agreement for a business combination that would result in Eos becoming a publicly listed company. Upon closing of the transaction, the combined company will be renamed Eos Energy Storage, Inc. and intends to list its shares of common stock on Nasdaq under the ticker symbol "EOSE". In connection with the business combination, BRPM II has filed a preliminary proxy statement with the United States Securities and Exchange Commission ("SEC"). BRPM II stockholders and other interested persons are advised to read, when available, the preliminary proxy statement and any amendments thereto and, once available, the definitive proxy statement, in connection with BRPM II's solicitation of proxies for the meeting of stockholders to be held to approve, among other things, the Transaction, because the proxy statement will contain important information about BRPM II, Eos and the Transaction. This material is not a substitute for the definitive proxy statement/prospectus regarding the Transaction. Investors and securityholders are urged to read the proxy statement, any amendments thereto and any other relevant documents that are filed with the SEC carefully and in their entirety because they contain important information about BRPM II, Eos and the propped business combination. When available, the definitive proxy statement will be mailed to BRPM II stockholders as of a record date to be established for voting on the Transaction. Stockholders will also be able to obtain copies of the proxy statement, without charge, once available, at the SEC's website at www.sec.gov. Copies of the documents filed with the SEC by BRPM II when and if available, can be obtained free of charge by directing a written request to B. Riley Principal Merger Corp. II, 299 Park Avenue, 21st Floor, New York, New York 10171 or by telephone at (212) 457-3300.

Participants in the Solicitation
BRPM II and its directors and executive officers may be deemed participants in the solicitations of proxies from BRPM II's stockholders with respect to the Transaction. A list of the names of those directors and executive officers and a description of their interests in BRPM II is contained in the preliminary proxy statement and will be included in the definitive proxy statement when available. Eos and its directors and executive officers may also be deemed to be participants in the solicitation of proxies from the stockholders of BRPM II in connection with the Transaction.

Forward-Looking Statements and Investment Considerations
This presentation includes "forward-looking statements" within the meaning of the "safe harbor" provisions of the Private Securities Litigation Reform Act of 1996. BRPM II's and Eos's actual results may differ from their expectations, estimates and projections and consequently, you should not rely on these forward-looking statements as predictions of future events. Words such as "expect", "estimate", "project", "budget", "forecast", "anticipate", "intend", "plan", "may", "will", "could", "should", "believes", "predicts", "potential", "continue", and similar expressions are intended to identify such forward-looking statements. These forward-looking statements include, without limitation, BRPM II's and Eos's expectations with respect to future performance and anticipated financial impacts of the Transaction, the satisfaction of closing conditions to the Transaction and the timing of the completion of the Transaction. These forward-looking statements involve significant risks and uncertainties that could cause the actual results to differ materially from the expected results.

Factors that may cause such differences include, but are not limited to: (1) the inability of BRPM II to enter into a definitive agreement with respect to the Transaction or to complete the Transaction; (2) matters discovered by BRPM II or Eos as they complete their respective due diligence investigations of each other; (3) the outcome of any legal proceedings that may be instituted against BRPM II or Eos following announcement of the Transaction; (4) the risk that the announcement or consummation of the Transaction disrupts current plans and operations; (5) the inability to recognize the anticipated benefits of the Transaction; (6) costs related to the Transaction; (7) changes in the applicable laws or regulations; and (8) other risks and uncertainties indicated from time to time in BRPM II's filings with the SEC. BRPM II cautions that the foregoing list of factors is not exclusive and not to place undue reliance upon any forward-looking statements, which speak only as of the date made. Neither BRPM II nor Eos undertakes or accepts any obligation to release publicly any updates or revisions to any forward-looking statements to reflect any change in its expectations or any change in events, conditions or circumstances on which any such statement is based.

Industry and Market Data
In this presentation, we rely on and refer to information and statistics regarding market participants in the sectors in which Eos competes and other industry data. We obtained this information and statistics from third party sources, including reports by market research firms and company Filings.

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Use of Projections
This presentation also contains certain financial forecasts of Eos, which were prepared in good faith on a basis believed to be reasonable. Such financial forecasts have not been prepared in conformity with GAAP. Neither BRPM II's nor Eos's independent auditors have studied, reviewed, compiled or performed any procedures with respect to the projections for the purpose of their inclusion in this presentation, and accordingly, neither of them expressed an opinion or provided any other form of assurance with respect thereto for the purpose of this presentation. These projections are for illustrative purposes only and should not be relied upon as being necessarily indicative of future results. In this presentation, certain of the above -mentioned projected information has been provided for purposes of providing comparisons with historical data. The assumptions and estimates underlying the prospective financial information are inherently uncertain and are subject to a wide variety of significant business, economic and competitive risks and uncertainties that could cause actual results to differ materially from those contained in the prospective financial information. Projections are inherently uncertain due to a number of factors outside of Eos's control. Accordingly, there can be no assurance that the prospective results are indicative of future performance of the combined company after the Transaction or that actual results will not differ materially from those presented in the prospective financial information. Inclusion of the prospective financial information in this presentation should not be regarded as a representation by any person that the results contained in the prospective financial information will be achieved.

Use of Non-GAAP Financial Measures
This presentation includes non-GAAP financial measures, including EBITDA. BRPM II and Eos believe that these non-GAAP measures are useful to investors for two principal reasons: 1) these measures may assist investors in comparing performance over various reporting periods on a consistent basis by removing from operating results the impact of items that do not reflect core operating performance; and 2) these measures are used by Eos's management and board of directors to assess its performance and may (subject to the limitations described below) enable investors to compare the performance of Eos and the combined company to its competition. BRPM II and Eos believe that the use of these non-GAAP financial measures provides an additional tool for investors to use in evaluating ongoing operating results and trends. These non-GAAP measures should not be considered in isolation from, or as an alternative to, financial measures determined in accordance with GAAP. Other companies may calculate these non-GAAP measures differently, and therefore such measures may not be directly comparable to similarly titled measures of other companies. This presentation includes financial forecasts, including, but not limited to, with respect to Eos's EBITDA. A reconciliation of these forward-looking non GAAP financial measures to the most directly comparable GAAP financial measures is not provided in this presentation because neither BRPM II nor Eos is able to provide such reconciliation without unreasonable effort.

Participating Management

Dan Shribman
CEO of B. Riley Principal Merger Corp. II and Chief Investment Officer of B. Riley Financial

Russ Stidolph
Chairman of the Board

Joe Mastrangelo
Chief Executive Officer

Nathan McCormick
Senior Vice President, Operations

Francis Richey
Vice President, Research & Development

Daniel Friberg
Senior Vice President, Technology

Sagar C. Kurada
Chief Financial Officer

Agenda

+ Welcome, Transaction Overview	Dan Shribman
+ Addressable Market	Russ Stidolph
+ Company Overview	Joe Mastrangelo
+ Technology Evolution	Francis Richey
+ Product Development	Daniel Friberg
+ Supply Chain Readiness	Nathan McCormick
+ Pipeline and Growth Strategy	Joe Mastrangelo
+ Financial Overview	Sagar Kurada
+ Questions & Answers	Management Team

Transaction Overview

Dan Shribman
CEO of B. Riley Principal Merger Corp. II and
Chief Investment Officer of B. Riley Financial

Transaction Overview

1. B. Riley Principal Merger Corp. II (NYSE:BMRG, "BRPM II") has entered into a definitive agreement to combine with Eos Energy Storage LLC ("Eos")
2. The combined company is expected to be capitalized with $202m of new equity which will be used to support the build-out of incremental manufacturing capacity and accelerate the global sales pipeline[1]
3. Deal capitalization includes a $40m equity commitment by B. Riley Financial
4. Existing Eos investors are rolling forward 100% of their equity in Eos into the combined company
5. The Board will be comprised of 7 members including: Chairman Russ Stidolph, CEO Joe Mastrangelo and B. Riley Financial CIO Daniel Shribman
6. Seeking to close business combination with first day of new Eos trading mid - November, subject to BRPM II stockholder approval

Sources ($mm)	BRPM Cash Held In Trust	$177
	Existing Eos Shareholders Roll	$300
	PIPE backstop	$40
	Total Sources	**$517**
Uses ($mm)	Shares to Existing Eos Shareholders	$300[3]
	Estimated Fees and Expenses	$15
	Cash to Facilitate Growth	$202
	Total Uses	**$517**

(1) Based on fully diluted shares outstanding at $10.00 share price. Excludes 9.08MM warrants outstanding, with a strike price of $11.50 per share. Excludes 3.75MM earn-out shares. Assumes no redemption of BRPM II public shares.
(2) Based on management's estimates
(3) Subject to certain downward adjustments, and the other terms and conditions set forth in the Merger Agreement, at Closing Eos's securityholders will receive aggregate consideration equal to up to $300 million of shares of the BMRG II common stock (including shares issuable upon exercise of certain options to acquire such shares), or up to 30,000,000 shares (assuming exercise of certain options to acquire such shares) valued at $10.00 per share.

Investment Rationale

1. Battery storage is the main technology driving the energy storage market today.

2. Energy storage provides flexibility and can enhance the reliability and resiliency of energy grid operations providing customer solutions.

3. As renewable energy generation continues to grow, storage will play a critical role in balancing the variable output of wind and solar farms. Storage will can help to optimize renewable energy when there is excess generation and discharging energy when it is needed.

4. Recent public policies and regulations updates will help energy storage reach its full potential.

5. Eos represents a safe, scalable, efficient, low cost and reliable alternative to Lithium-ion with over 10 years of proven research and development.

6. Experienced management team and a proven track-record of scaling business operations and growth

Addressable Market

Russ Stidolph
Chairman

The World is Electrifying – Global Energy Storage Market Estimated to Attract $660 Billion of Investment by 2040

~11%	27%	19% → 32%	2,850 GWh	15%
of global population without electricity	Additional global electricity demand by 2030 (1)	Secular shift to renewable penetration by 2030	Global storage opportunity by 2040	U.S. share of global demand in this period

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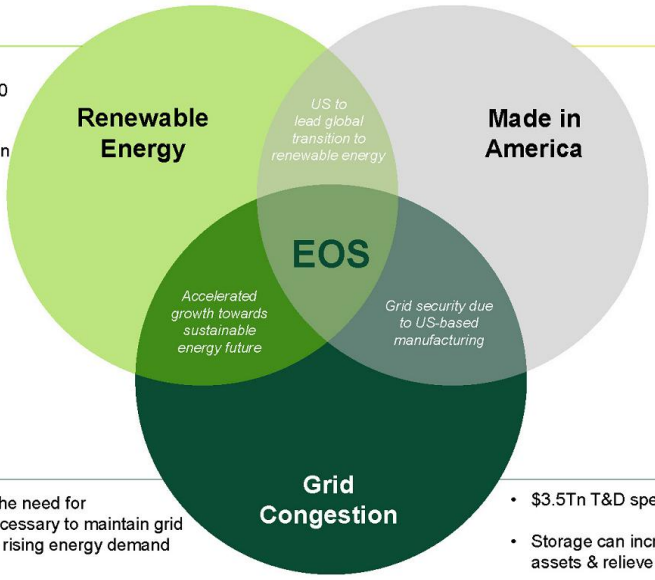
Source: BNEF, U.S EIA, World Bank, United Nations.
(1) Represents incremental global electricity demand to 2030 divided by 2019 global electricity consumption.

US Energy Ecosystem at Inflection Point

Energy storage to provide essential infrastructure for renewable energy proliferation and grid congestion management
$200bn+ total storage spend by 2030; Every 1% market share in 2030 = $850m in revenue

- Estimated penetration in renewable energy from 18% in 2019 to 36% by 2030
- Battery technology to play a pivotal role in renewable energy development and reduce volatility of energy prices
- 1,250 GW of additional capacity from renewables by 2024; Storage is key.



- Partner to facilitate job creation and US energy independence
- Domestic manufacturing to position the US at the frontier of the clean energy revolution
- Patented domestic technology
- No rare earth materials, further increasing energy independence

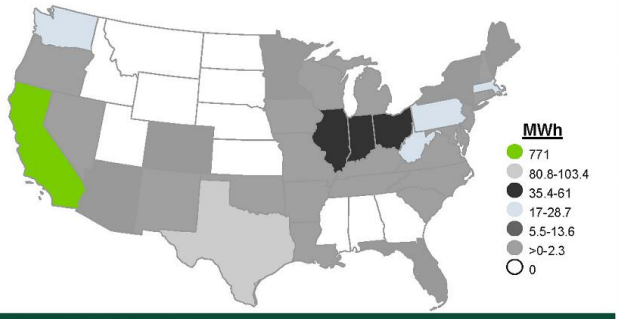
- Energy storage to mitigate the need for infrastructure investment necessary to maintain grid integrity and security due to rising energy demand

- $3.5Tn T&D spend required by 2030
- Storage can increase utilization of existing assets & relieve congestion during peak hours

Source: BNEF; International Renewable Energy Agency; Solar Energy Industries Association

Regulatory Policy Acting as a Significant Tailwind for Energy Storage Deployment

Cumulative Energy Storage Deployments



U.S. State Energy Targets

CA	▪ 13 GWH of Battery Storage by 2030 in California. ▪ The CPUC has mandated utilities to procure up to 500 MW of BTM storage
MA	▪ Energy storage procurement target of 1,000 MWh by 2025 ▪ SMART program calls for 1,600 MW of PV but includes 'adders' if paired with storage
NY	▪ Target of 1,500 MW by 2025 (3,000 MW by 2030), 500 MW expected is C&I ▪ $400M in state funding available for energy storage projects
NJ	▪ Announced energy storage deployment target of 2 GW by 2030, with an interim goal of 600 MW by 2021
AZ	▪ Anticipated 3 GW energy storage target to be achieved by 2030 ▪ Clean Peak Target which increases clean resources deployed during peak times by 1.5% per year until 2030

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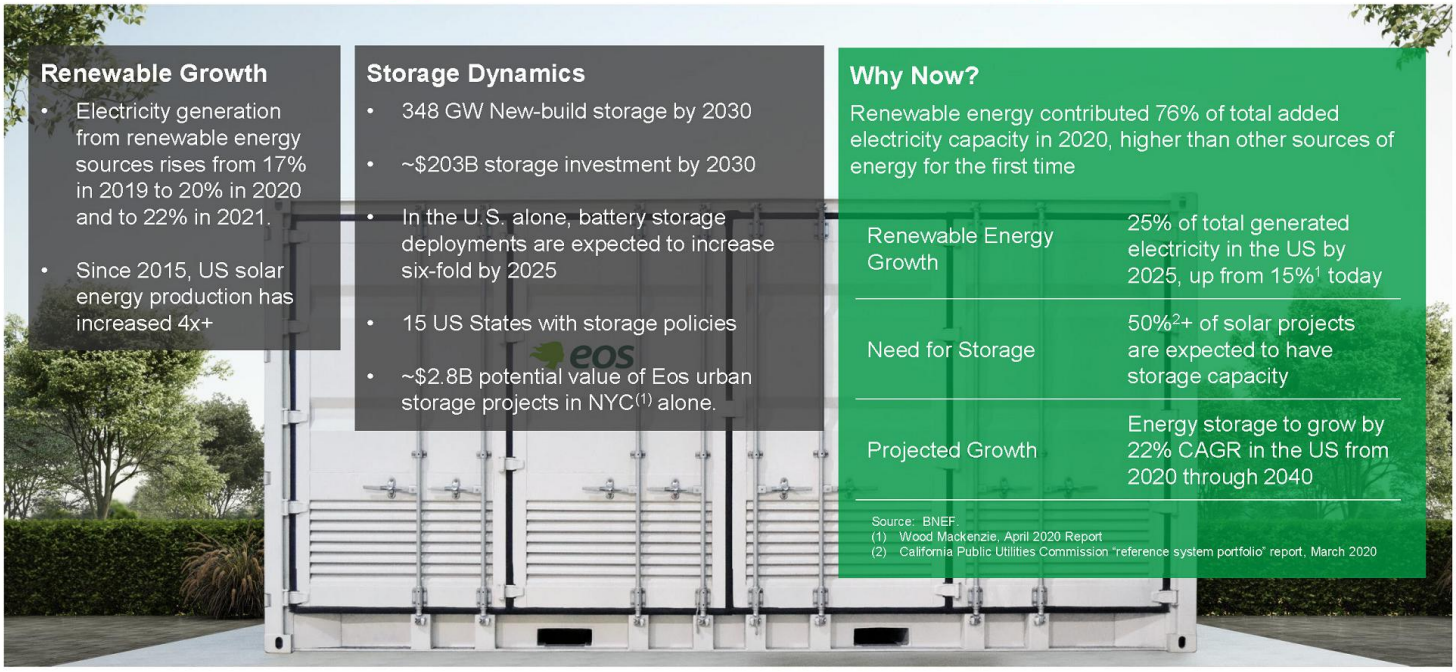
Sources: HIS, BNEF.

Renewable Energy Penetration to Drive Energy Storage Growth



Renewable Growth

- Electricity generation from renewable energy sources rises from 17% in 2019 to 20% in 2020 and to 22% in 2021.
- Since 2015, US solar energy production has increased 4x+

Storage Dynamics

- 348 GW New-build storage by 2030
- ~$203B storage investment by 2030
- In the U.S. alone, battery storage deployments are expected to increase six-fold by 2025
- 15 US States with storage policies
- ~$2.8B potential value of Eos urban storage projects in NYC(1) alone.

Why Now?

Renewable energy contributed 76% of total added electricity capacity in 2020, higher than other sources of energy for the first time

Renewable Energy Growth	25% of total generated electricity in the US by 2025, up from 15%[1] today
Need for Storage	50%[2]+ of solar projects are expected to have storage capacity
Projected Growth	Energy storage to grow by 22% CAGR in the US from 2020 through 2040

Source: BNEF
(1) Wood Mackenzie, April 2020 Report
(2) California Public Utilities Commission "reference system portfolio" report, March 2020

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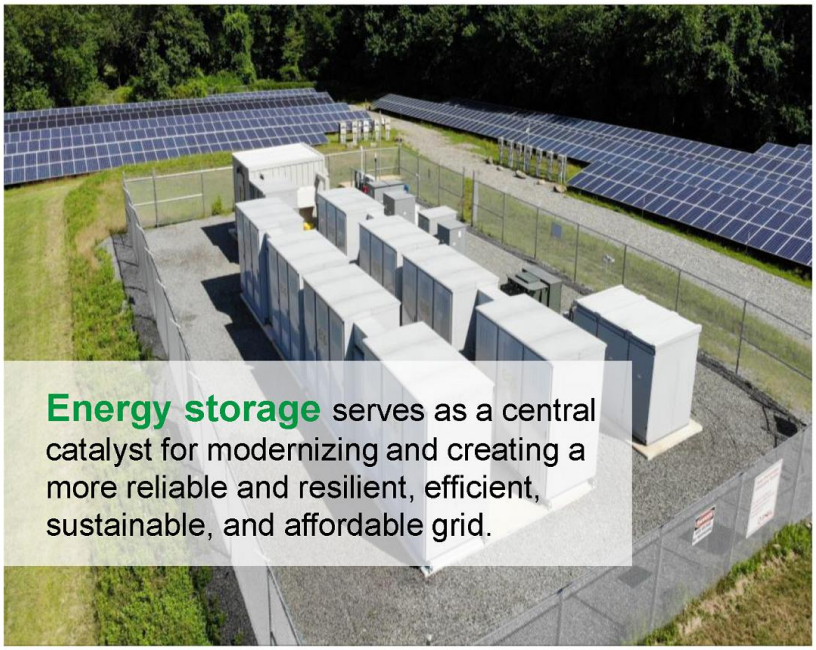
-Source: BNEF, NYC Planning and October 2020 EIA Short-term Energy Outlook
- 1) Assumes 10% Eos penetration rate for indoor urban storage projects in large NYC buildings with basements (~23,000). Assumes Eos provides the DC system only (and one per building).

Company Overview

Joe Mastrangelo
Chief Executive Officer

Eos Energy Storage System



Energy storage serves as a central catalyst for modernizing and creating a more reliable and resilient, efficient, sustainable, and affordable grid.

Eos is powering the clean energy renaissance with a positively ingenious energy storage solution

- Global energy storage market estimated to grow 20% CAGR over 20 years
- Eos technology is optimized for the 4+ hour storage market
- Zinc electrolyte-based chemistry; No rare earth minerals required
- Fully recyclable, non-flammable, and non-toxic
- Made in the USA

Leveraging Scalable, Smart, Safe Technology for a Best-in-Class Commercial Battery Solution

Eos Value Proposition

Simple

- Five core commodities in a simple configuration
  - Zinc
  - Bromine
  - Titanium
  - Graphite Felt
  - Plastic

Scalable

- 7-Easy steps of manufacturing
- 12 months or less set up time
- Readily available commodities used in other industries
- No supply chain constraints

Smart

- Modular product configuration
- Easily integrated DC system
- Fully integrated battery management software stack

Safe

- No risk of fire or thermal runaway
- Wide operating range from -20°-45° C without HVAC

Sustainable

- Fully recyclable
- No rare earths or conflict materials
- Batteries can be refurbished, repackaged and resold

Commercial

- Asset sale
- AC or DC integration
- Financing / leasing
- Extended warranty
- After-market support
- Easy to maintain

Our technology is a next generation storage solution helping to advance a low carbon, more resilient and sustainable energy future.

Technology Evolution

Significant milestones achieved since inception

Gen. 1.0 commercial prototype

Gen. 2.0 beta system released

- Robust mechanical design
- BMS software & firmware
- Field operations
- Product certifications

Operating Gen. 2.0 projects

SB Energy, PSEG, UCSD, Duke Energy, Statkraft BrytEnergy, Black & Veatch

- Executed on 3 continents
- Operated from -10C to 50C without HVAC
- DC coupled solar to C&I installations

Gen. 2.3 program launch

- Containerization
- Plastics welding
- Material reduction
- Improved manufacturing yields
- Fully recyclable

Gen. 3.0 program launch

- Reduce footprint
- Low cost of material
- Lower installation costs

2017 | **2018** | **2019** | **2020** | **2021+**

Gen 1.0 performance	
Power	.5 kW
Energy	2.1 kWh
RTE	65-70%

Gen 2.0 performance	
Power	100 kW
Energy	300 kWh
RTE	70-75%

Gen 2.0 performance	
Power	100 kW
Energy	300 kWh
RTE	70-75%

Gen 2.3 performance	
Power	150 kW
Energy	600 kWh
RTE	75-80%

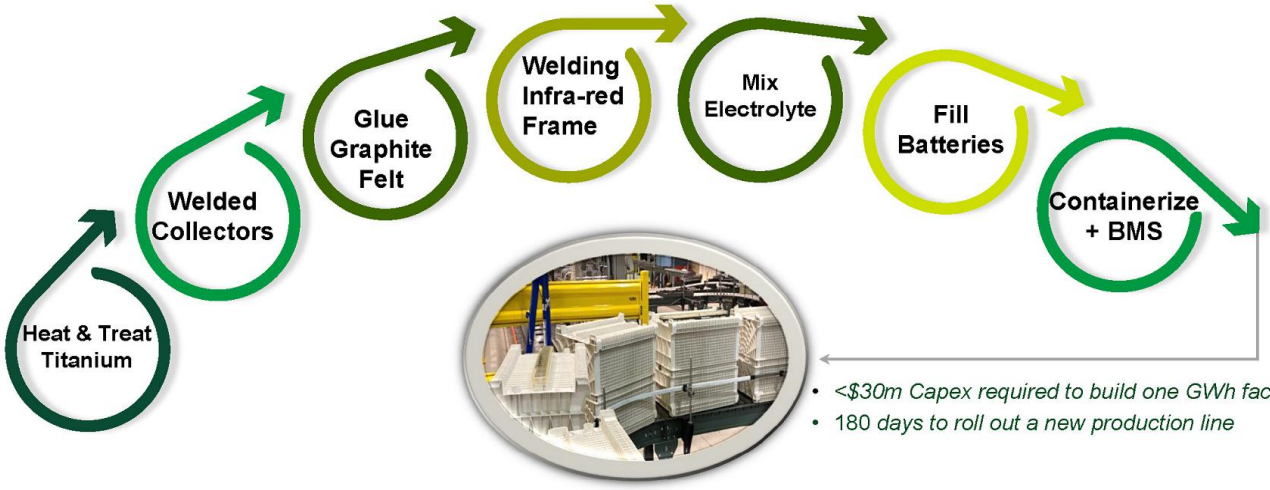
Gen 3.0 performance	
Power	175 kW
Energy	700 kWh
RTE	80%+

We are committed to continuous improvement and innovation.

Note: Performance of Gen 2.0 Beta has been validated by a third-party commissioned expert technical report.

Simple, Efficient, Modular & Scalable Manufacturing

Company plans to have 7+ GWh of production capacity by 2024



Eos' highly scalable manufacturing platform can be localized anywhere in the world in <12 months for less than ~$30m.

Note: Holtec, a leading nuclear & power equipment maker is a strategic investor in Eos, and its JV partner in Pittsburgh; Eos maintains optionality on wholly-owned manufacturing facility going forward

Lower Customer Risk, Increased ROI, Added Safety

Improved performance resulting in ~30% reduction in levelized cost of storage

Depth of Discharge

Eos: Designed for 100% utilization, no additional upsizing required

Li-ion: 80% DoD requires 20% more batteries to deliver the same kWh

$52/kWh CapEx Savings

Wide Operating Temperature Range

Eos: Flat performance curve from –20 to 45ºC; no need for HVAC

Li-ion: Restricted to 25ºC ± 5ºC; requires HVAC and fire suppression

$17/kWh CapEx Savings

No Supply Chain Constraints

Eos: Widely available commodities and off-the-shelf components

Li-ion: Limited supply of Lithium and Cobalt, competing demand from portables and EVs

<6 month lead time

Flexible Charge / Discharge Duration

Eos: Can charge and discharge at different rates depending on changing use cases

Li-ion: Charge and Discharge rates are fixed at the start, and can degrade life if not used as rated

↑ Revenue **↓ Risk**

Low Maintenance

Eos: Simple fans, no fire suppression, recovers from 90ºC+ abuse cycles

Li-ion: HVAC and fire suppression, requires maintenance CapEx

$1/kWh/yr Opex Savings

Flat Degradation Curve

Eos: 1.8% / year loss of energy; 20+ year life

Li-ion: 2.5% / year loss of energy; 12 year life

$3/kWh/yr Opex Savings

Ride Through Grid Outages

Eos: Continue charging even when AC grid is down

Li-ion: Cannot operate without grid power (due to aux. load)

↑ Availability

Minimal Auxiliary Load

Eos: Fans represent 1.5% of delivered energy

Li-ion: HVAC represents 8% of delivered energy

$2/kWh/yr Opex Savings

Fully Recyclable

Eos: All components are recyclable, salvage value of 30% of cost

Li-ion: non-recyclable components, $8/kWh disposable cost

$4/kWh NPV Savings

(1) RTE (round trip efficiency) is defined as the amount of energy retained in the storage system from the original DC input and supplied thereafter to a DC / AC system during discharge

Robust Long-Term Value Proposition to Customer

Competing Technologies

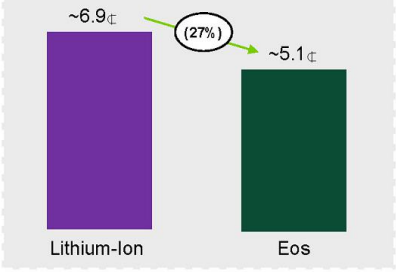
Eos

Li-Ion

Flow

Customer Value Proposition

Lower lifetime cost & lower risk



Drivers

- Lower initial capital expenditure
- Lower lifetime operating cost
- Improved charging costs
- Minimal Auxiliary load losses

Eos Technology Uses & Applications

Storage solution optimized for the critical 4+ hour global storage market; ideal for renewable plus storage and grid congestion applications

Market Segments	Application	Value Proposition	Market Size	Pipeline Clients
	▪ Co-location of battery storage with renewable generation assets	▪ Shift renewable power to when the grid needs it most ▪ Avoid curtailment and enable higher utilization of clean power assets	▪ 34,159 MWh ▪ CAGR +35% vs. 2020	PRIMERGY, 8minute Solar Energy
	▪ T&D deferral and Grid Resilience ▪ Shaving peak loads and replace aging peaker generation assets	▪ Ability to defer/mitigate infrastructure upgrade costs and minimize outages ▪ Provides easy to deploy generation capacity to load centers where it is needed most ▪ Store inexpensive electricity for use during peak hours	▪ 28,787 MWh ▪ CAGR +33% vs. 2020	PSEG, Duke Energy, conEdison, International Electric Power, Carson Cogeneration Company, LP
	▪ Behind-the-meter energy management solutions at large commercial or industrial sites ▪ Microgrid resiliency and peak shifting	▪ Shift peak demand needs to reduce electricity costs ▪ Microgrid resiliency/backup power ▪ Security	▪ 15,405 MWh ▪ CAGR +31% vs. 2020	FLB Fisher Brothers, Shell, Motor Oil

Eos technology enables its customers to advance their own sustainability, resiliency and low-carbon goals

Technology Evolution

Francis Richey
Vice President, Research & Development

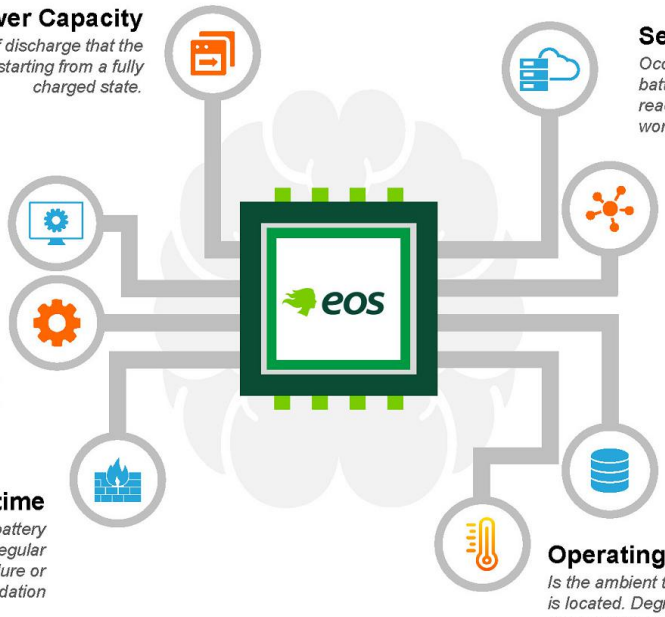
What are the Key Characteristics of a Battery Storage System?

Rated Power Capacity
the maximum rate of discharge that the BESS can achieve, starting from a fully charged state.

Energy Capacity
is the maximum amount of stored energy

Storage Duration
Is the amount of time storage can discharge at its power capacity before depleting its energy capacity.

Cycle Life/Lifetime
is the amount of time or cycles a battery storage system can provide regular charging and discharging before failure or significant degradation



Self Discharge
Occurs when the stored charge (or energy) of the battery is reduced through internal chemical reactions, or without being discharged to perform work for the grid or a customer.

State of Charge
Expressed as a percentage, represents the battery's present level of charge and ranges from completely discharged to fully charged

Round Trip Efficiency
measured as a percentage, is a ratio of the energy charged to the battery to the energy discharged from the battery.

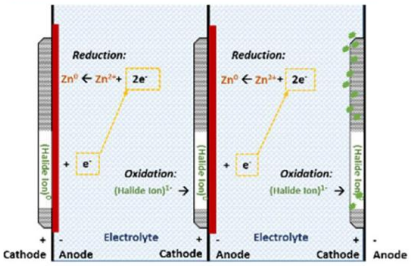
Operating Temperatures
Is the ambient temperature environment where the system is located. Degradation rates and energy capacity can change with temperature for some battery chemistries.

Eos Chemistry Overview

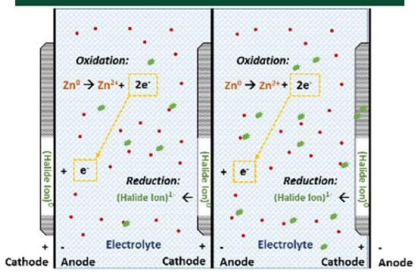
- ✓ Reversible zinc plating and halide redox with large aqueous electrolyte pool in a sealed bipolar battery
- ✓ Zn and Zn2+ accumulate at the anode Ti current collector
- ✓ Ha and Ha- accumulate at the cathode current collector

Chemical Inspiration: Zinc Plating Baths

Top of Charge



End of Discharge and Rest



To specifically design and build a battery for the utility; combining known chemistries and striving to simplify design, manufacturing, and system requirements

Superior Technology Delivers Competitive Advantages Over Li-ion

Safer, environmentally friendly and cheaper energy storage solution

eos		Lithium-ion battery technology Li+
✓ Low cost aqueous zinc ✓ Unrestricted depth of discharge ✓ Flexible modular configurations, AC or DC coupled, outdoor or indoor ✓ Plug & play design with battery management system	SCALABLE	• Higher Maintenance & Capex costs due to HVAC and fire suppression • Restricted depth of discharge at ~20%-80% • Better suited for EV markets • Solar shifting use accelerates degradation
✓ No rare earth material ✓ Fully recyclable ✓ No fire risk / thermal runaway ✓ Operating in extreme heat / cold	EARTH-FRIENDLY	• Flammable and toxic • Multiple recorded fire and/or explosion incidents • Extremely narrow temperature operating range • HVAC / fire suppression required • Unsafe to dispose
✓ 15 – 30yr. battery life ✓ Logged 10,000 operating hours in the field ✓ No sudden death	BUILT TO LAST	• Higher degradation at full discharge, reducing lifetime • R&D focused mostly on the EV segment, optimizing battery performance for shorter duration discharge
✓ Made in America (Pittsburgh, PA) ✓ No clean rooms needed ✓ Highly capital efficient and modular manufacturing ✓ **Manufacturing platform** deployable in <12 months anywhere in the world for less than $30m (GWh/yr.)	MADE IN USA	• Predominantly manufactured in China, Korea & Japan • Supply-chain bottlenecks • Higher upsizing system costs / Costly quality control • Significant scale required to deliver favorable unit economics

Eos. Positively ingenious.

eos

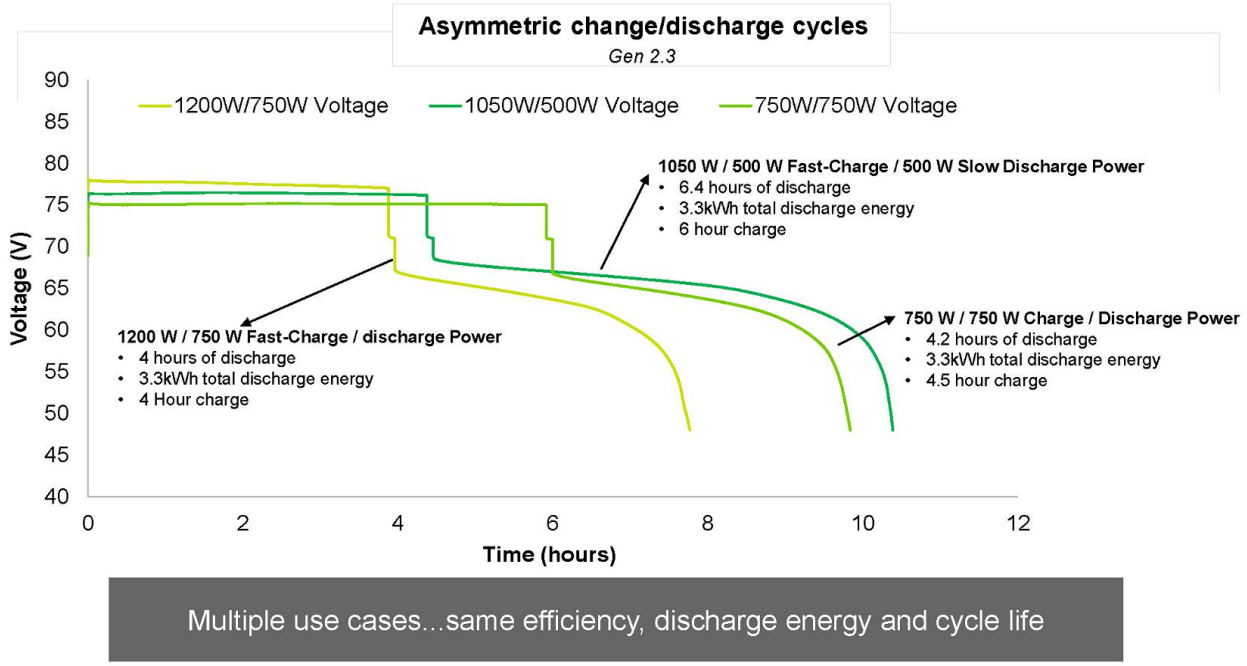
Battery Testing Facility in Edison, NJ

Eos Edison HQ Battery Test Lab Capabilities

- 60 programmable battery module channels
- 1,200 programmable lab cell channels
- 3 high temperature chambers
- 1 programmable environmental chamber
- 4 Energy Block System-ready Test Bays
- 960,000 cycles achieved since 2016
- >73 MWhr of discharged energy since 2016

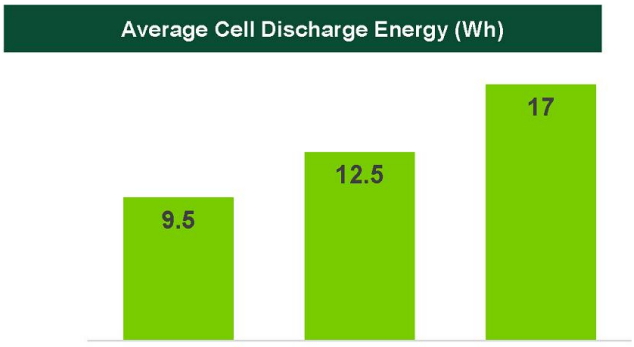
Eos. Positively ingenious.

Eos Delivers Customer Operating Flexibility



Multiple use cases…same efficiency, discharge energy and cycle life

Technology Evolution



	Gen 1	Gen 2	Gen 2.3
Time on test	6 years	3 years	0.5 years
RTE:	65%-70%	70-75%	75%-80%
Energy:	1.5kWh	2kWh	3.5kWh
Cell Design:	Bolted	Glued	Welded

Fundamental Chemistry Unchanged

1) Improved mechanical design
   - Increased power density
   - higher operating temperature

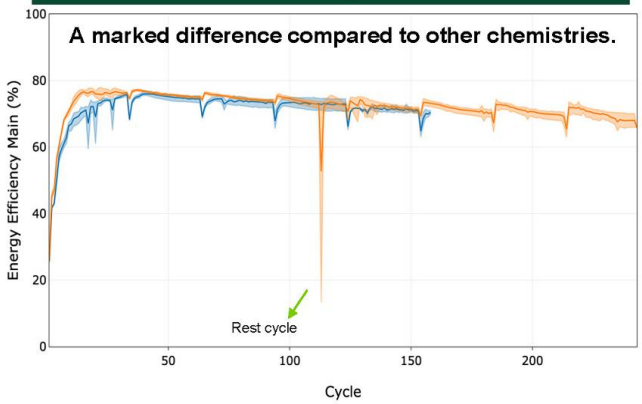
2) Better raw material quality
   - No custom components
   - Stronger QA/QC processes

3) Increased manufacturing consistency
   - Plastic welding
   - Process automation

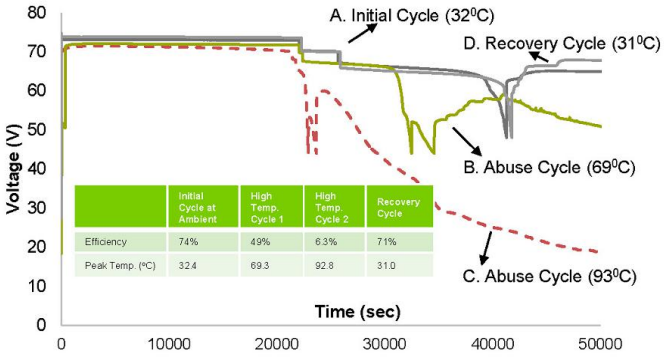
~10 years of testing that delivers improved performance with long cycle life

Safe Operation in Aggressive Environments – Elevated Temperature Testing

Energy: Improved consistency and efficiency in elevated 50ºC testing.



Robust Recovery: Resilient and resistant after extreme temperatures.



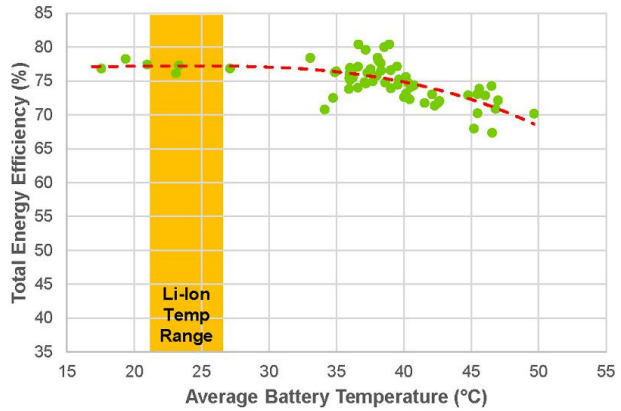
	Initial Cycle at Ambient	High Temp. Cycle 1	High Temp. Cycle 2	Recovery Cycle
Efficiency	74%	49%	6.3%	71%
Peak Temp. (ºC)	32.4	69.3	92.8	31.0

Battery is extremely resilient to aggressive environments and recovers after extreme temperature abuse testing, without the need for HVAC

Eos Battery Outperforms Li-Ion in Extreme Temperatures

Nominal Energy Efficiency vs Temperature

Gen 2.0 Battery



Flat operating curve across a wide temperature range

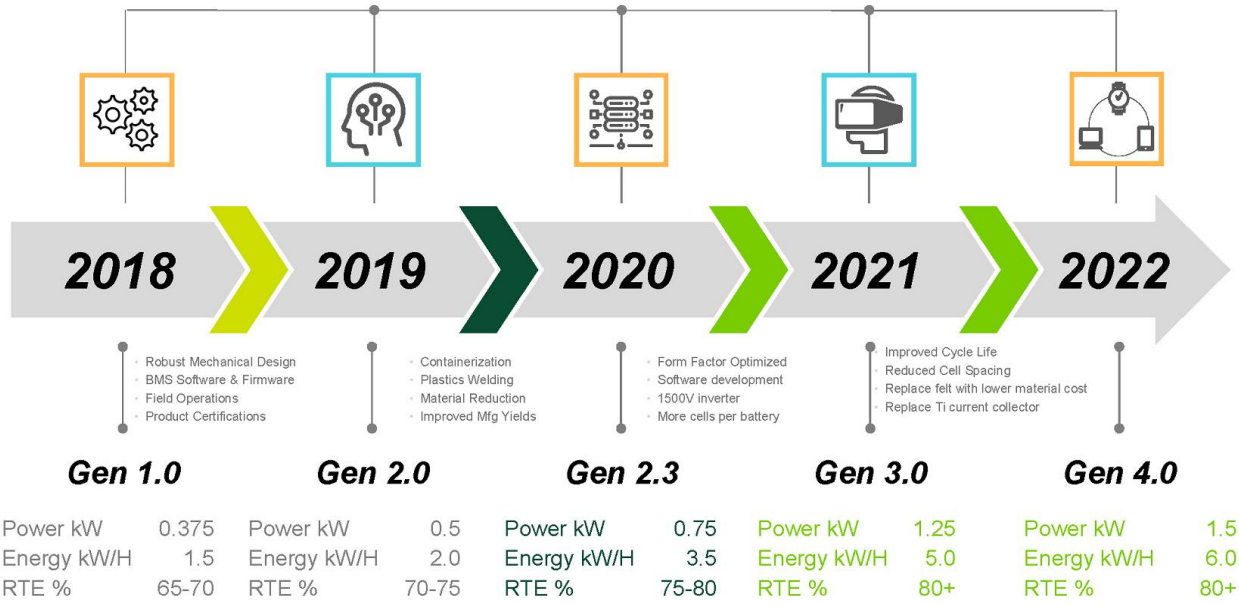
Demonstrable Characteristics

- **Eos system has been tested over temperature ranges up to 50°C ambient**
  - Wide temperature range from -12°C (NJ) to 48°C (India)
- **Eos rides through Grid Outages**
- **Minimal impact on depth of discharge, RTE or degradation at higher temperatures**

Improved levelized cost of storage, safety and reliability

* Efficiency values vary due to use case variations in operation of the systems

Clear Roadmap for Eos Battery Incremental Improvements



Gen 1.0		Gen 2.0		Gen 2.3		Gen 3.0		Gen 4.0	
Power kW	0.375	Power kW	0.5	Power kW	0.75	Power kW	1.25	Power kW	1.5
Energy kW/H	1.5	Energy kW/H	2.0	Energy kW/H	3.5	Energy kW/H	5.0	Energy kW/H	6.0
RTE %	65-70	RTE %	70-75	RTE %	75-80	RTE %	80+	RTE %	80+

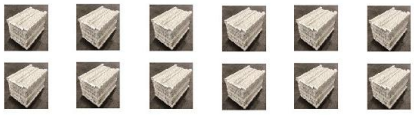
Product Development

Daniel Friberg
Senior Vice President, Technology

eos

Typical DC System Configuration & Layout Options






1 Cell	40 Cells 1kW | 4.2kWh	12 Modules 12kW | 50kWh	12 Strings 150kW | 600kWh	Up to 20 connected Energy Blocks to single inverter

Flexible Storage Configurations to Fit Customer Needs

Containerized
(10MW = 0.5 acres)

- Outdoor rated configuration
- Can be double stacked
- Arrives fully assembled from Eos factory

PowerHouse
(10MW = 0.15 acres)

- Indoor racking configuration
- Suitable to optimize foot print
- Improved aesthetic look

Indoor Urban
10MW = (15,000 sqft)

- Designed to meet FDNY requirements
- Utilize space inside large urban buildings

All Eos energy storage systems are protected and monitored by Eos' proprietary Battery Management System

Global Deployments with Industry Leaders

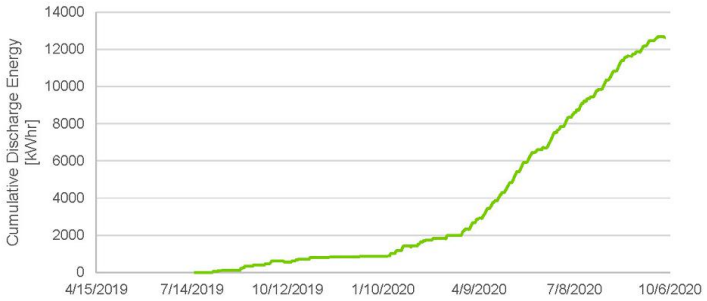
Announced Projects				
	Project	Status	Use Case	Location
Gen2.0	eos	Operating	Multi	
	Large Global IPP	Complete	Solar Shifting	
	PSEG	Operating	FR & Microgrid	
	DUKE ENERGY.	Operating	Solar Shifting	
	Shell / Black & Veatch	Operating	Microgrid	
	UCSD	Operating	BTM	
	Statkraft BrytEnergy	Commissioning	BTM	
	SDGE	Complete	CAISO Market-Arb	
Gen2.3	SDGE	Manufacturing	CAISO Market-Arb	
	Motor Oil Ingeteam	Manufacturing	BTM	
	AYO	Manufacturing	Microgrid	

Case Study 1: Duke Energy

Project Overview

30 kW	120 kWh	DC-Coupled w/ Solar

Total Discharge Energy



Project Highlights

- DC Coupled with customers PV system
- Installation to operation in 30 days
- COD: July 2019

- Peak Efficiency: 73%
- Discharge Time: 3 – 5.5 hours
- System Auxiliary Load: 0.3 – 0.4 kW

Customer Feedback

- Eos claim of 100% use of SOC verified
- Simplicity of Eos design decreases operating cost
- O&M costs estimated to be 35% lower (no HVAC), low aux. losses.
- No fire risk - a significant benefit

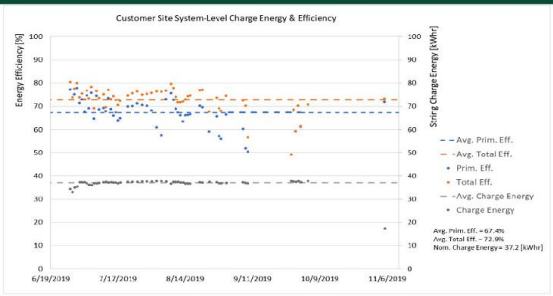
- Recycle/disposal at end of life is a significant advantage as Lithium disposal is an unknown
- $2/MWh LCOS advantage relative to Li-Ion
- "I can't hear it" – There is no noise generated by Eos system

Case Study 2: Large Global IPP

Project Overview/System Specification

Description	▪ One Aurora 2.0 Energy Stack supporting DC-coupled solar shifting at an existing 3MW solar plant
Location	▪ Kurnool, India
Size	▪ 1 Energy Stack, 6 Strings, 72 batteries
Operation Date	▪ March 2019 ▪ 120 cycles performed, 9MWh delivered, 1,000+ hours of operation

Energy and Efficiency During Operational Cycles



Project Highlights

Metric	Max	Min	Average
Primary Power	29.93 kW	21.95 kW	27.91 kW
Primary Discharge Duration	4.24 hr	2.32 hr	2.75 hr
Secondary Power	14.39 kW	4.2 kW	7.88 kW
Secondary Discharge Duration	12.74 hr	1.12 hr	3.98 hr
Temperature	53.5 °C	33.8 °C	44.43 °C
RTE	75.66%	69.20%	72.82%

Lessons Learned / Product Improvements

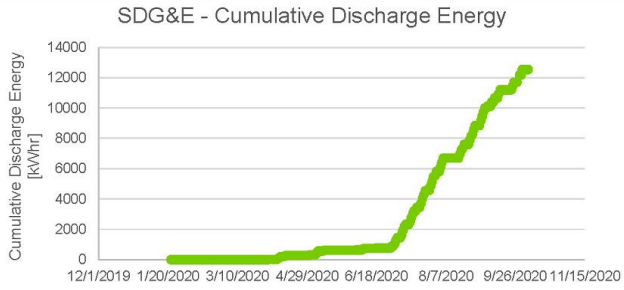
Lesson Learned	Subsequent Product Improvement
Overseas Deployment	▪ Developed operational capabilities to deploy and support product overseas ▪ Executed "Make in India" strategy implementing onsite battery filling and integration
High Temperature Performance	▪ Demonstrated that batteries are safe and resilient even when reaching temperatures as high as 70 °C ▪ Removed outer shells and upgraded ventilation to provide additional cooling ▪ Routinely operating at ambient temperatures as high as 45 °C

Case Study 3: SDG&E

Project Overview

100 kW	300 kWh	Grid Connected Eos Aurora System

Total Discharge Energy



Project Highlights

- Grid connected at SDG&E Pala substation
- COD: Jan 2020
- Full operation was delayed due to COVID in the spring

- Average Efficiency: 73%
- Discharge Time: 3 – 5.5 hours
- Wholesale Arbitrage use case demonstration

Observations

- Successfully operated by SDG&E during rolling blackouts in August – September
- Eos battery system successfully responded to all high priority dispatch by SDG&E
- Customer Feedback – Eos battery system was able to operate where other battery systems in the same substation failed to operate during rolling blackouts.
- SDG&E preparing site for a new Eos Gen 2.3 system.

Positive Performance of Eos Battery Over Strenuous UL Testing Standards

Eos is in the process of getting product safety UL certifications complete for:

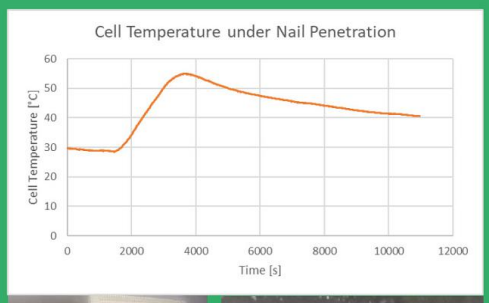
- UL 1973: "Standard for Safety, for Stationary Applications"
- UL 9540A: "Standard for Safety for Thermal Runaway", represents harshest abuse testing

Test Type/Description	Eos Performance	Lithium Ion Performance	Eos Next Steps
Over Discharge: Discharge to zero voltage	✓ None ✓ Ready for continued operation	• Permanent damage/capacity loss, current collector dissolution	Test Performed Successfully, Awaiting UL Acceptance
2½" Nail Penetration: Inject nail through battery case, causing cell short	✓ 25°C temperature rise	• Short circuit, Flame, thermal runaway (varies with cell Li-ion chemistry)	Test Performed successfully, Awaiting UL Acceptance
200% Overcharge: Charge battery indefinitely to about 200% nominal charge	✓ Battery reaches 90°C, No Flame, no explosion; electrolyte/steam release at terminals and gas channel	• Lithium plating on anode, thermal runaway, fire explosion. Requires expensive overcharge protection electronics	Test Performed, Adjust Gas Channel Cover and Pressure Relief to improve gas channel seal. Awaiting UL analysis of gas sample collected
Battery Short Circuit: Connect + & – terminals together while battery is fully charged resulting in >20x nominal current	✓ Battery reaches 80°C and 425 amps of peak current, No Flame, no explosion; steam release at terminals and gas channel	• Flame, thermal runaway, explosion (varies with cell type)	Test Performed, Adjust Gas Channel Cover and Pressure Relief to improve gas channel seal

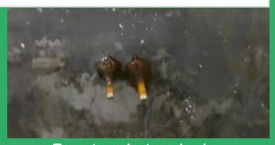
Nail Penetration Test

Eos ZnYTH Technology

No leak, no crippling rise in temperature



Rise in temp but no fire

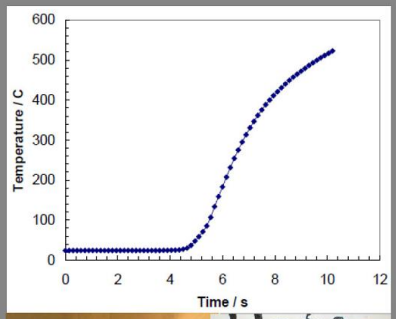


Puncture but no leak

https://youtu.be/ilkyKX1WSIU

Lithium Ion(1)

Short circuit, flame, crippled by rising temperature

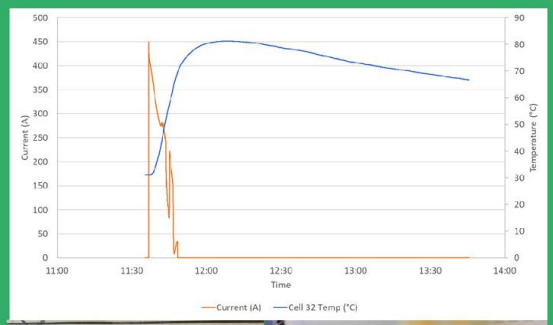


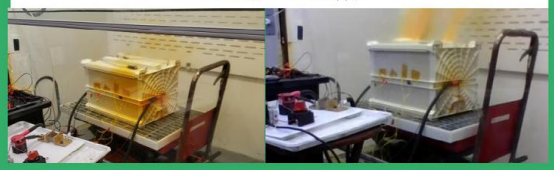
https://www.youtube.com/watch?v=jnXYDRifTBA

(1) Source: TIAX LLC es142_sriramulu_2013_p.pdf

Short Circuit Test

Eos ZnYTH Technology





Some venting of steam, over 425A current (>20x nom.) on a 20A rated battery.

https://youtu.be/oGUnS5y9KMM

Lithium Ion(1)

Heavy combustible gas venting, then a large explosion and resulting fire

https://www.youtube.com/watch?v=HCGtRgBUHX8

Lesson Learned	Eos Product Improvements
Venting of water steam from cover	▪ Battery cover seal will be adjusted to prevent steam escape ▪ Adjust pressure relief valve that will control steam outflow

(1) Source: University Of Maryland

Supply Chain Readiness

Nathan McCormick
Senior Vice President, Operations

Eos Manufacturing Facility

In joint venture partnership with Holtec

Created HI-POWER to Deliver a 'Made in USA' Product

Holtec Manufacturing Division, Pittsburgh PA

1.5 GWh/year production in North America

- Dedicated Manufacturing joint venture, HI-POWER, established with Holtec International
- $2-3bn privately held company and leading equipment supplier to the nuclear industry

Production started – Fully prepared to Scale

Note: Performance of Gen 2.0 Beta has been validated by a third-party commissioned expert technical report.

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HI-POWER Scaling to Demand

Capacity Growth Lead Times

- Supply Base capacitated for ramp up w/ <6-month lead time
- ~30 employees/line - basic factory skill set, 3 months to hire, train and qualify

Eos Supply Chain Evolution in the Last 12 Months

Safer, environmentally friendly and cheaper energy storage solution

1. Launched US Manufacturing

- **Holtec:** Signed 50/50 for manufacturing in the USA
- **1 Fully automated** and integrated facility
- **1.5 GWh** Annual manufacturing capacity
- **6 month** lead time on delivery

2. Localized Supply

- **Titanium:** Rolled, Cleaned and Treated in Pennsylvania
- **Battery Case/HDPE Frames:** Molded in Michigan
- **Manufacturing:** 100% at HI-POWER

3. Scaling for Growth

- **Electrode Assembly:** 2nd line operational in 1Q21
- **Infra Red Welding:** 2x capacity by year end, 4x by 1Q21
- **Robotic Welder Loading:** Higher throughput, reduced cost

4. Process and Supply Improvements

- **Graphitized Felt:** Higher quality, more consistent supply
  - 12% increase in discharge energy
  - 10% increase in energy efficiency
- **Current Collector:** Transitioned to Continuous Laser Weld
  - 3% increase in efficiency
- **Titanium Plates:** Improved plate to plate consistency
  - Optimized Furnace design/layout for higher conversion rate
  - Automated sandblasting for consistency
- **Battery Case**: Shifted from Gluing to Infra-red Welding
  - Wider operating temperature range
  - Higher operating pressure tolerance
  - More consistent depth of pool


Play Video
Hi-Power site
eos
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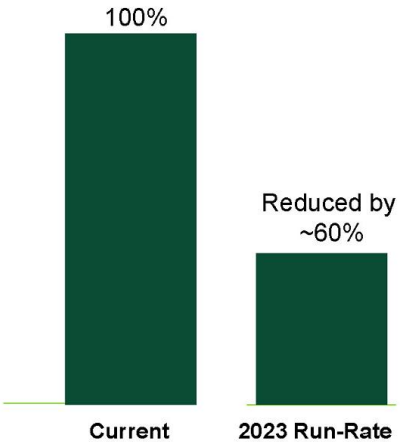
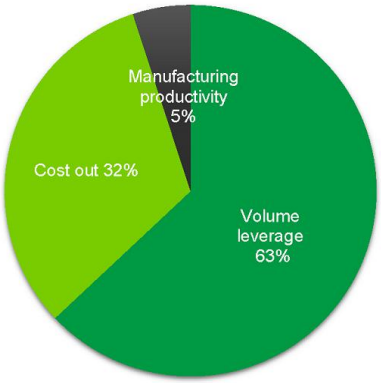
Eos DC System Cost Roadmap

Roadmap *($/KWh)* ▶ **Drivers** *(% of current)* ▶ **Key Actions** *(already underway)*





- >60% of cost out secured with vendor quotes and purchase orders
- Improved aspect ratio and power density
- Manufacturing productivity & automation
- Insource/vertical integration

Battery cost includes fully containerized system with BMS

Pipeline and Growth Strategy

Joe Mastrangelo
Chief Executive Officer

Eos Growth Gameboard

	Front of the Meter: Renewable Load-Shifting	Front of the Meter: Locational Capacity	Behind the Meter: Industrial Optimization	Behind the Meter: Indoor Urban
Sales Cycle	12 to 24 months	18 to 24 months	6 to 12 Months	6 to 12 Months
Avg Project Size / $ Value	• ~100-150 MWh • $10m – 40m	• ~150-200 MWh • $10m – 50m	• ~8-10 MWh • $1m – 4m	• ~4-5 MWh • $1m – 2m
Illustrative Partner	Ingeteam	conEdison	msi global business solutions; MAYO	ECM
Process	• Develop strategic relationship • Detailed deal economics • RFP/Direct Negotiation	• Develop strategic relationship • Detailed deal economics • RFP/Direct Negotiation	• End user/channel partner relationship • Economics driven • Not RFP driven	• Safety and limited risk paramount
Current Pipeline Opportunity[1]	• 7,830 MWh	• 4,200 MWh	• 1,740 MWh	• 730 MWh
Existing and Potential Customers	MINUTE SOLAR ENERGY; ReNew POWER; PRIMERGY; DUKE ENERGY	Hecate Energy; Ørsted; Origis Energy; INTERNATIONAL ELECTRIC POWER; Carson Cogeneration Company, LP	MOTOR OIL; Shell	VORNADO REALTY TRUST; FB FISHER BROTHERS; generation capital

(1) Based on management's estimates.

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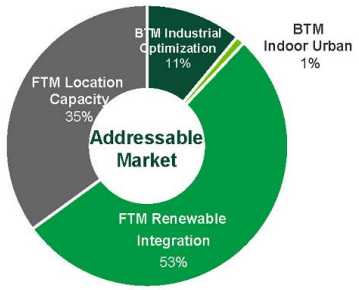
14.5 GWh Actively Managed Orders & Pipeline

130+ potential clients engaged addressing short-term and medium-term priorities

1



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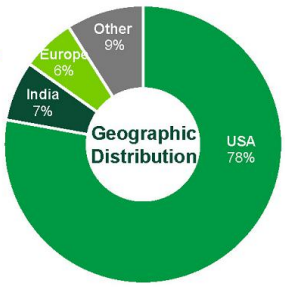

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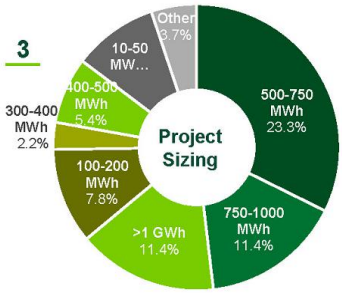

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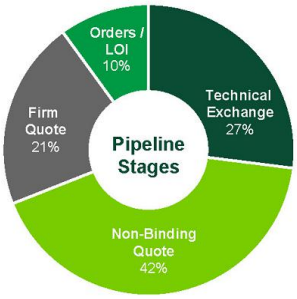

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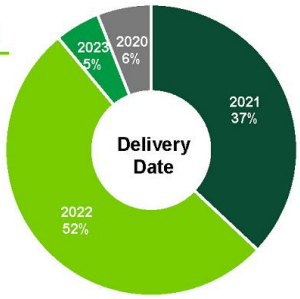

Present Focus

- US centric focus on capture evolving secular trends
- Addressed Direct channel (FTM), large projects focused on longer delivery horizon
- Successfully delivered 1.5GWh signed LOIs

2021+

- Extend FTM relationships to deliver "follow-on" orders
- Focused on building BTM urban storage strategy
- Expand global presence

Note: Pipeline data as of August 2020.

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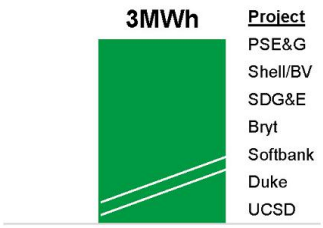
Pipeline Execution

1. Current Global Deployments



3MWh

Project	MWh
PSE&G	1.2
Shell/BV	0.6
SDG&E	0.6
Bryt	0.2
Softbank	0.1
Duke	0.1
UCSD	0.1

Delivered

2. Orders Backlog

12MWh

Project	MWh
Motor Oil	4.0
Nayo	3.0
Carson	3.0
Verdant	1.8
SDG&E	0.6

Current

3. Customer Commitments

3,000MWh

Project	MWh
IEP ✓	1,000.0
Adv. Opportunity 4	1,000.0
Carson ✓	500.0
Adv. Opportunity 3	200.0
Adv. Opportunity 2	160.0
Adv. Opportunity 1	80.0
Advanced NRG 2 ✓	20.0
Advanced NRG 1 ✓	4.0
Con Ed ✓	0.6

Signed LOI's / Commitments

[1] Advance Opportunities, signing LOI in next 30-60 days

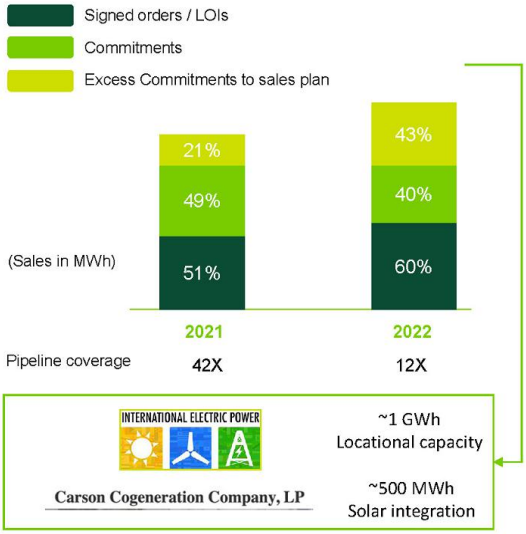
✓ Signed LOI's

Building operating references & orders backlog…Concert opportunities over next 6-9 month

Sales Execution

Sales Volume (Shipments in MWh)

Eos's booked orders, LOIs and advanced opportunities of 3GWh providing ample of next two years sale targets



INTERNATIONAL ELECTRIC POWER

Carson Cogeneration Company, LP

~1 GWh
Locational capacity

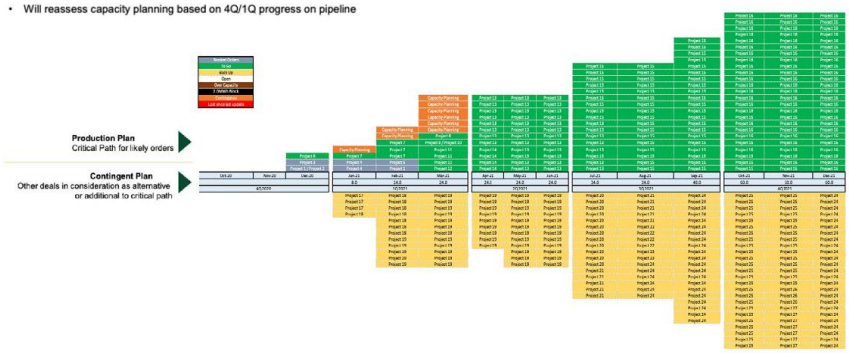
~500 MWh
Solar integration

Aligning Manufacturing & Maintaining Shipments in Line with Orders

Eos's operational and manufacturing team is working closely with sales personnel to accommodate customer orders and maintain timely shipment and delivery schedule

Building capacity in-line with pipeline expected delivery and commissioning:

- 3-month lead time for long lead direct materials / 6-month lead time for long lead CapEx
- Leverage deferred sales for safety stock/business continuity planning
- Will reassess capacity planning based on 4Q/1Q progress on pipeline



Eos. Positively ingenious.

Financial Overview

Sagar C. Kurada
Chief Financial Officer

Applications Generate Multiple Revenue Streams

Front of the Meter Applications

Containerized Power House

Behind the Meter Applications

Energy Block

Indoor Urban

Simple to install, operate and maintain

No HVAC or fire suppression systems required

Fully customizable

Modular racks for indoor storage

One-time Revenue Streams	Ongoing Revenue Streams
Sales	Maintenance
Financing	Long-term Service Contracts
Installation & Commission	Battery Management System Performance Monitoring

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Projected Income Statement

$m	2020	2021	2022	2023	2024 Base	2024 Growth
Sales Volume (MWh)	**13**	**260**	**1,511**	**4,620**	**6,786**	**11,654**
% growth		-	*481.9%*	*205.7%*	*46.9%*	*152.2%*
Total revenue	**2.5**	**50.3**	**268.6**	**735.5**	**994.9**	**1,700.4**
% growth	-	-	*434.2%*	*173.8%*	*35.3%*	*131.2%*
% market share	*0.1%*	*0.9%*	*3.5%*	*7.1%*	*8.7%*	*14.9%*
Total COGS	7.2	63.4	240.9	603.0	745.9	1,279.8
Gross profit	**(4.7)**	**(13.1)**	**27.7**	**132.4**	**249.0**	**425.1**
% gross margin	*NM*	*NM*	*10.3%*	*18.0%*	*25.0%*	*25.0%*
R&D	3.3	10.9	14.9	30.0	42.0	42.0
Other opex	5.3	9.9	18.8	58.2	72.8	100.6
Total opex	**8.6**	**20.8**	**33.7**	**88.3**	**114.8**	**142.6**
Income from JV	(0.8)	2.0	13.0	14.8	15.0	15.1
Adjusted EBITDA	**(14.1)**	**(32.0)**	**7.0**	**58.8**	**149.2**	**297.6**
% margin	*NM*	*NM*	*2.6%*	*8.0%*	*15.0%*	*17.5%*
Maintenance CapEx	0.1	0.5	1.5	3.5	4.1	6.5
% of revenue	*4.0%*	*1.0%*	*0.6%*	*0.5%*	*0.4%*	*0.4%*
Growth CapEx	5.1	9.9	71.2	31.0	4.0	16.0
% of revenue	*205%*	*20%*	*27%*	*4%*	*0.4%*	*0.9%*

Note: leasing options for battery systems under review

Revenue

- Current asset pricing assumes a 10% annual price reduction, in line with BNEF forecast
- 88% of revenues represent sales of Eos Systems
- Ongoing revenue from current asset sales expected to grow as Eos footprint and installed base in market increases

Gross Margin rate

- Profitable in 1Q'22 with less than 3% market share captured
- Volume leverage, Technology roadmap and In-sourcing drive ongoing-productivity
- DC unit costs assumed to reach ~$100/kWh by 2023+

Capital Expenditure

- $97m invested in 3 manufacturing plants by 2024 / 7GWh annual production capacity
- Low investment risk given short investment lead time of <1year
- CAPEX Plan includes additional $34m to support all cost out actions and manufacturing productivity

Positioned to succeed

- Energy storage an exponential growth opportunity ... a small share = a large company
- Storage shifting from frequency regulation (short duration) to firm capacity (long duration) ... From <2 to >4 hours driven by solar penetration
- Grid resiliency (extreme weather) requires improved safety and reliability ... non-flammable, non-toxic & fully recyclable
- Success requires a robust technology, low-cost product and scalable supply chain ... Experienced leadership in place

A strong team with clear priorities focused on delivering


Q&A
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Eos Energy Storage

Investor Presentation

October 2020

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