stem

Leader in AI-Driven Storage Solutions

September 2021

Cautionary Statement Regarding Forward-Looking Statements

This presentation, as well as other statements we make, contain "forward-looking statements" within the meaning of the federal securities laws, which include any statements that are not historical facts. Such statements often contain words such as "expect," "may," "can," "believe," "predict," "plan," "potential," "projected," "projections," "forecast," "estimate," "intend," "anticipate," "ambition," "goal," "target," "think," "should," "could," "would," "will," "hope," "see," "likely," and other similar words. Forward-looking statements address matters that are, to varying degrees, uncertain, such as the reduction of greenhouse gas ("GHG") emissions; the integration and optimization of energy resources; the business strategies of Stem and those of its customers; the global commitment to decarbonization; our ability to secure new customers, or to retain current customers, further penetrate existing markets or expand into new markets; our ability to mitigate supply chain risk and otherwise to manage our supply chains and distribution channels; the continuing severity, magnitude and duration of the COVID-19 pandemic and the Delta variant, including effects of the pandemic, and of businesses' and governments' responses to the pandemic; the impact of natural disasters and other events beyond our control; and future results of operations. Such forward-looking statements are subject to risks, uncertainties, and other factors that could cause actual results to differ materially from those expressed or implied by such forward-looking statements. These forward-looking statements are based upon assumptions and estimates that, while considered reasonable by Stem and its management, depend upon inherently uncertain factors and risks that may cause actual results to differ materially from current expectations, including our inability to help reduce GHG emissions; our inability to seamlessly integrate and optimize energy resources; our inability to achieve our financial and performance targets and other forecasts and expectations; our inability to recognize the anticipated benefits of our recent business combination with Star Peak Energy Transition Corp. ("Star Peak"); our ability to grow and manage growth profitably; risks relating to the development and performance of our energy storage systems and software-enabled services; the risk that the global commitment to decarbonization may not materialize as we predict, or even if it does, that we might not be able to benefit therefrom; our inability to retain or upgrade current customers, further penetrate existing markets or expand into new markets; our inability to secure sufficient inventory from our suppliers to meet customer demand, and provide us with contracted quantities of equipment; supply chain failures or interruptions; manufacturing or delivery delays; disruptions in sales, production, service or other business activities; our inability to attract and retain qualified personnel; the risk that our business, financial condition and results of operations may be adversely affected by other political, economic, business and competitive factors; and other risks and uncertainties set forth in the section entitled "Risk Factors" in the registration statement on Form S-1 filed with the SEC on July 19, 2021, and our most recent Forms 10-K, 10-Q and 8-K filed with or furnished to the SEC. If one or more of these or other risks or uncertainties materialize (or the consequences of any such development changes), or should our underlying assumptions prove incorrect, actual outcomes may vary materially from those reflected in our forward-looking statements. Statements in this presentation are made as of the date of this presentation, and Stem disclaims any intention or obligation to update publicly or revise such statements, whether as a result of new information, future events or otherwise.

Non-GAAP measures

This presentation includes financial measures that are calculated and presented on the basis of methodologies other than in accordance with generally accepted accounting principles in the United States of America ("GAAP"). Such non-GAAP financial measures are in addition to, and should not be considered superior to, or a substitute for, financial statements prepared in accordance with GAAP. Non-GAAP financial measures should not be considered in isolation and are subject to significant inherent limitations. The non-GAAP measures presented herein may not be comparable to similar non-GAAP measures presented by other companies. Stem believes these non-GAAP measures of financial results provide useful information to management and investors regarding certain financial and business trends relating to Stem's financial condition and results of operations. Stem believes that the use of these non-GAAP financial measures provides an additional tool for investors to use in evaluating ongoing operating results and trends and in comparing Stem's financial measures with other similar companies, many of which present similar non-GAAP financial measures to investors. Reconciliation of these non-GAAP measures to their most directly comparable GAAP financial measures are included in the appendix of this presentation.

Industry and Market Data

In this presentation, Stem relies on and refers to certain information and statistics obtained from third-party sources which it believes to be reliable, including reports by market research firms. Stem has not independently verified the accuracy or completeness of any such third-party information.

This presentation may contain trademarks, service marks, trade names and copyrights of other companies, which are the property of their respective owners.

Stem is the first pure play smart energy storage company to go public in the US

Large Addressable Market + Strong Macro Tailwinds

- ~$1.2 trillion in new revenue opportunities for integrated storage expected to be deployed by 2050(1)
- Battery storage capacity expected to increase by 25x by 2030(2)

Market Leader with Best in Class Technology

- 950+ systems operating or contracted with Stem's Athena® software(3)
- First mover AI platform that operates with 40+ utilities, 5 grid operators and over 20MM runtime hours (2,200 years)

Balance Sheet Positioned to Capitalize on Growth

- ~$500MM(4) of cash on hand
- Well positioned to execute on key growth priorities and fund new customer acquisitions

Highly Visible Growth

- Recurring revenue streams provide strong financial position to accelerate growth
- Revenues projected to grow at ~50% CAGR from 2021 to 2026

(1) Bloomberg New Energy Finance. (2) Wood Mackenzie. (3) As of 31-Dec-2020 (4) as of 30-Jun 2021

Introductions

John Carrington
CEO and Director

Bill Bush
Chief Financial Officer

Larsh Johnson
Chief Technology Officer

Mark Triplett
Chief Operating Officer

Alan Russo
Chief Revenue Officer

Prakesh Patel
Chief Strategy Officer

Saul Laureles
Chief Legal Officer

Sylvia Lan
Vice President,
Human Resources

Matt Tappin
Vice President,
Corporate Development

Ted Durbin
Senior Director,
Investor Relations

Seasoned Leadership Team

- Seasoned leadership team with 150+ years of experience in software and energy
- Leadership experience at technology, energy, and industrial companies

REC SOLAR · TPG · SIEMENS · BORREGO SOLAR · First Solar · GE · ENGIE

Leading Strategic Investors

TOTAL · ONTARIO TEACHERS' PENSION PLAN · GE · Constellation · MITSUI&CO. · TEMASEK · COPEC · IBERDROLA · RWE

Solid Second Quarter Results

Key Metrics		
$ million unless otherwise noted	Three months Ended June 30,	
	2021	2020
Revenue	$19.3	$4.4
GAAP Gross Margin	($0.1)	($1.7)
GAAP Gross Margin %	-1%	-40%
Non-GAAP Gross Margin	$2.1	$0.2
Non-GAAP Gross Margin %	11%	5%
Net Loss	($100.2)	($19.0)
Adjusted EBITDA	($8.6)	($7.5)
*Operating metrics**		
12 Month Pipeline ($ billions)	$1.7	**
Contracted Backlog	$250	**
Contracted AUM (GWh)	1.2	0.5

* at period end

** not available

Highlights

Results

- Revenue up 339% YoY, at the high end of guidance, driven by FTM hardware sales and services revenue
- Solid gross margin growth from higher mix of software services
- Lower adjusted EBITDA driven by higher operating expenses due to increased personnel costs
- AUM more than doubled YoY driven by increased commercial activity and the addition of 345 MWh Electrodes portfolio
- Pipeline up 21% sequentially, and backlog up 13% sequentially, tied to increased FTM opportunities
- Dispatched over 500 MWh across US and Canada on multiple days in response to heatwaves and grid congestion

Guidance

- Reaffirmed full-year 2021 revenue and adjusted EBITDA targets

Source: Stem.
See appendix for a reconciliation of Non-GAAP measures to most directly comparable GAAP measures

Hardware Deliveries Drive Strong Recurring Software Cash Flows

Hardware + Network Integration

Total Deliveries (kWh)

(x) Project Hardware ASP ($kWh)

= Total Hardware Revenues

~10-30%

Hardware Gross Margin

- Upfront payment for initial purchase
- Hardware-agnostic platform
- Turnkey approach with focus on customer value

Software

Total AUM (kWh)

(x) Software Subscription ($/kWh/month)

= Total Software (Recurring) Revenues

~80%

Software Gross Margin

- Recurring SaaS model
- 100% attach rate secured by 10-20 year contracts with monthly recurring cash flow
- Revenue recognized ratably during life of the contract
- Additional upsell revenue from Athena applications

Market Participation

Total AUM (kWh)

(x) Stem's Market Participation Revenues ($/kWh)

= Total Software (Variable) Revenues

~80%

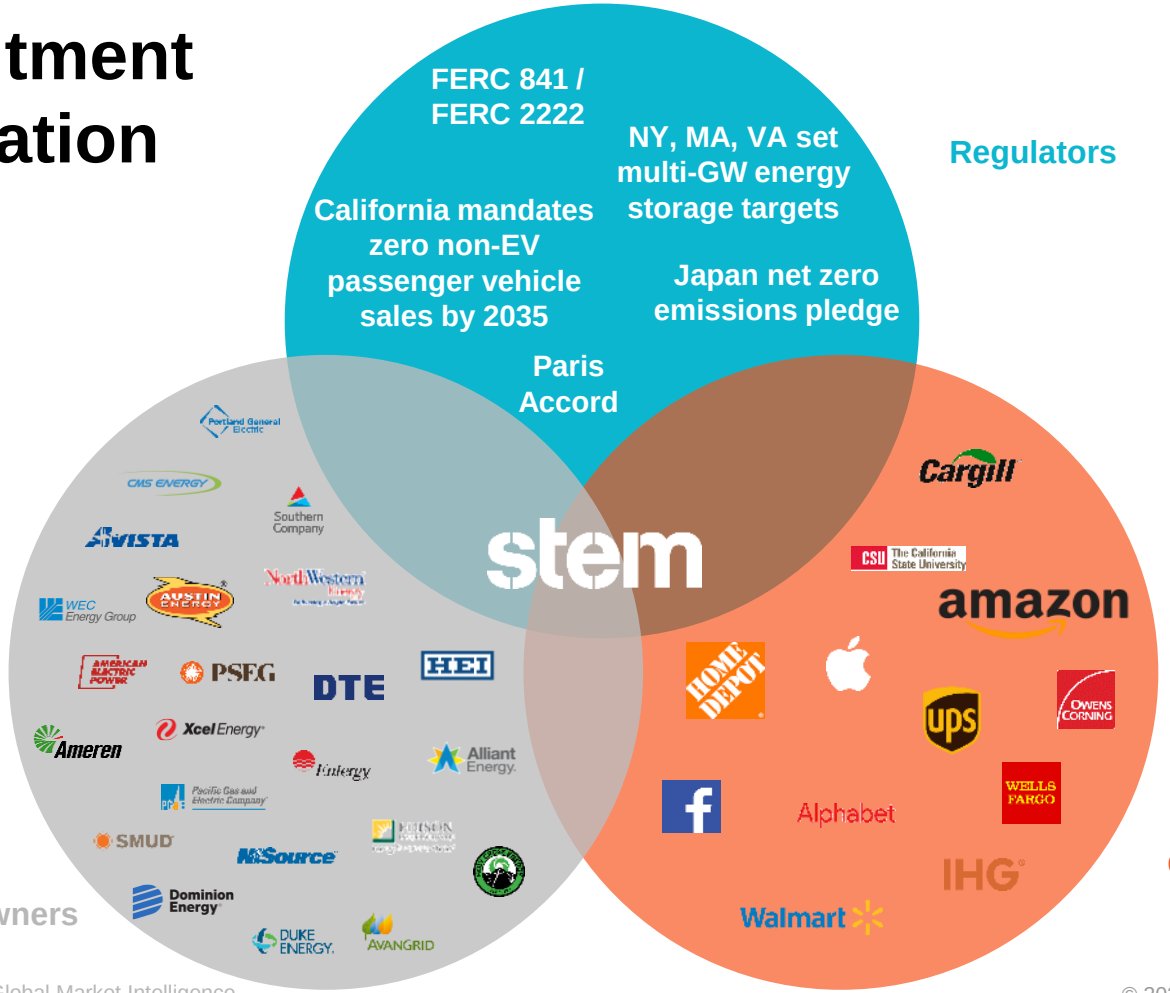
Market Participation Gross Margin

- Revenues from differentiated Athena capabilities and VPPs
- Secured by 3-20 year contracts
- Revenue recognized when realized
- Significant long-term value

stem

Global Commitment to Decarbonization

The world is committed to decarbonization, and Stem is well positioned to enable this transition.

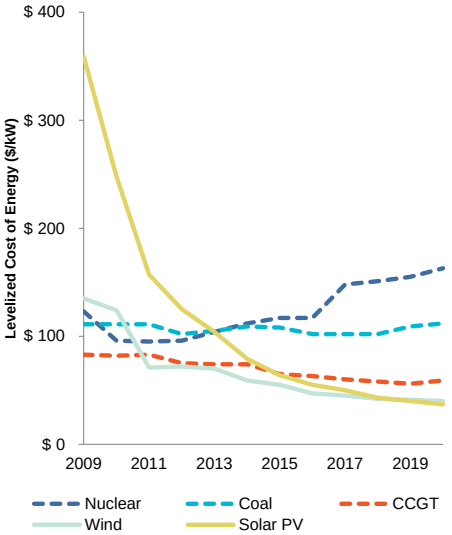


Source: Company filings, EEI, S&P Global Market Intelligence.

Clean Energy Technology Convergence: Disruption and Exponential Growth

Renewables

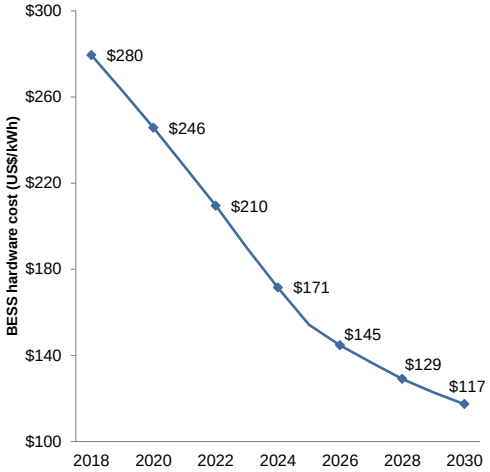
Lowest Cost Generation



+

Battery Hardware

Rapid Cost Reductions



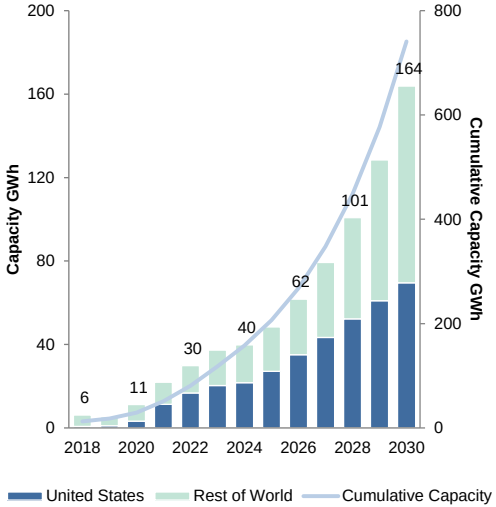
=

Storage Market

25x Growth (1)

Market Opportunity

$1.2 Trillion (2)

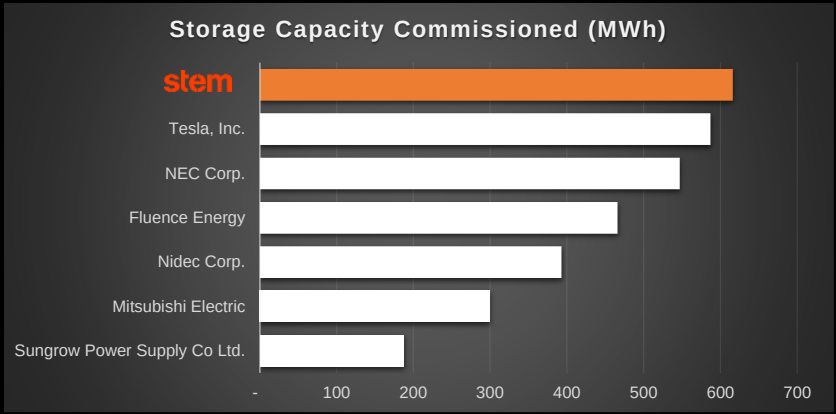


Source: Bloomberg New Energy Finance, Wood Mackenzie, Lazard LCOE.
Note: BESS includes battery rack, PCS, balance of system, energy management system and transformer costs. (1) Wood Mackenzie. (2) Bloomberg New Energy Finance. (3) Includes all FTM, non-residential and residential storage.

Stem is a Market Leader with Significant Scale and Visible Growth

Stem is a Leader in Deployments Worldwide[1]

One of the Top Systems Integrators by
Disclosed Commissioned Projects 2014-2020



- **950+ systems** operating or contracted (~1.2 GWh) [2]
- Systems operating in
  - **75 jurisdictions**
  - **200+ cities**

- **$1.7 billion Pipeline**[2]
- **$250MM of contracted backlog**[2]
- **~4x** revenue growth in 2021E

Note: Includes only lithium ion providers.
(1) Bloomberg New Energy Finance – Storage Assets Interactive Dataset; Reflects System Integrators by Capacity (MWh), filtered by Commissioning Date and Commissioned Status as of 12/31/2020; excludes self-build usage; Stem data from Company. (2) As of 30-June-2021. (3) Wood Mackenzie.

Stem Delivers a Strong Value Proposition to Customers

Behind the Meter "BTM"

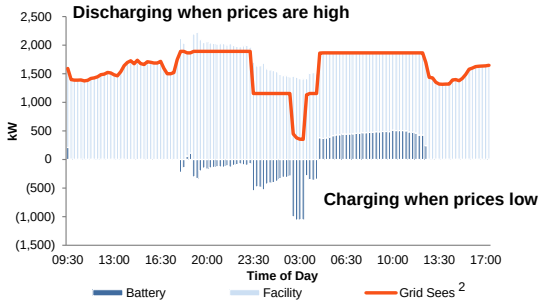
Commercial & Industrial

Reducing Consumer Energy Bill

Athena AI optimizes time-of-use and demand charges, resulting in 10% - 30% monthly electricity bill reductions

Corporate ESG Objectives

35% of Fortune 500 have committed to carbon neutrality[1]



Front of the Meter "FTM"

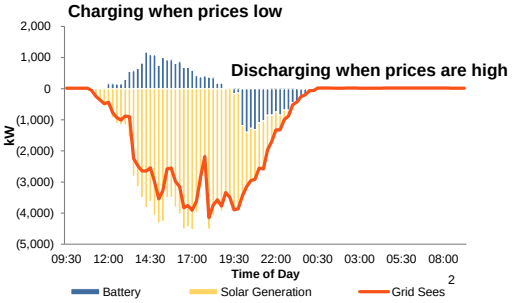
Utilities, IPPs, Developers

Increasing Asset Returns

Athena AI enables solar generation time-shifting and participation in ancillary revenue streams, resulting in 10% - 30% unlevered IRRs

Supports Grid Stability

Athena AI reduces volatility and supports local grid capacity needs



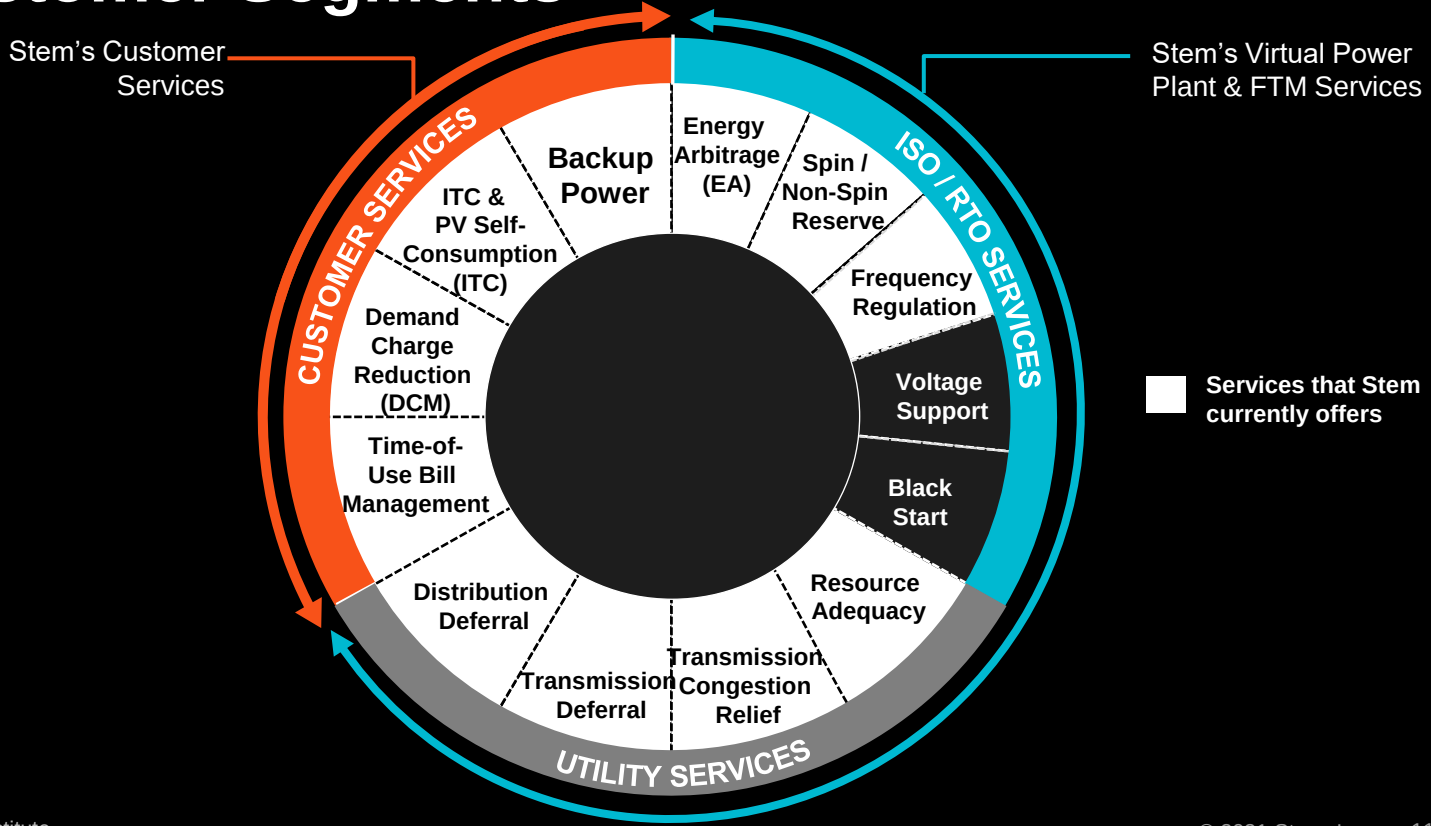
Source: Stem

(1) Natural Capital Partners. (2) In the top chart, Grid Sees is the net power draw from the grid after the activity of the battery; In the bottom chart, Grid Sees is the net delivery to the grid including the activity of the battery.

Athena Platform Delivers Value to Multiple Customer Segments

Stem offers more value streams in more markets with more asset types

AI-Driven Athena platform facilitates monetization of **11 out of 13** identified energy storage value streams



Source: Rocky Mountain Institute.

Smart Energy Storage Delivers Value in Wholesale Markets

AI Forecasts

solar generation and SOC, energy & regulation prices, market options, incentive goals

… Manages Constraints

such as solar-only charging, battery limits and LCOE, export limits, ramp rates, etc.

… Optimizes

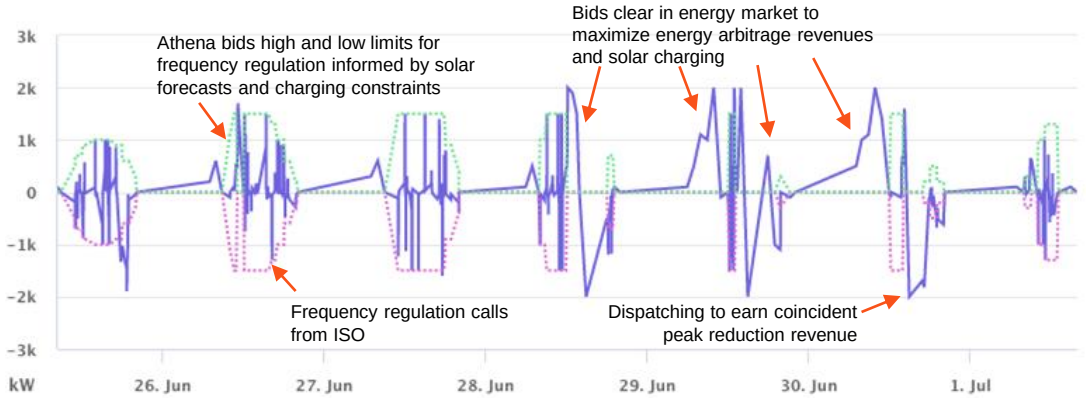
executing millions of scenarios per hour to determine best operation for each site

… and Bids

generating price-quantity pairs for day-ahead and real-time market intervals

Recent customer deployment benefitting from **six value streams**:

1. Day-Ahead & Real-Time Energy
2. Frequency Regulation
3. Capacity Market
4. Coincident Peak Reduction
5. Solar Shifting Incentives
6. Solar ITC Earnings



Athena software can generate 30%+ more savings than the competition

Stem wins 345 MWh site. . .

- SK and SUSI hold competitive RFP in 2020 to select software provider for **345 MWh**
- **25 Tier 1 commercial and municipal customers** in Los Angeles and Southern California Edison service territories
- Stem beat **10 bidders**, including energy services firms, based on Athena's advanced AI capability and demonstrated record of success

. . .and delivers 30% greater savings

- Stem integrates 86 sites in two months
- After six months of operation with Athena, customers realize more than **30% greater monthly energy savings** on average compared to the previous software provider

CASE STUDY: Electrodes Portfolio

Under Competitor Control

Software misses earnings opportunities

"Setpoint" set too low early in the bill cycle. . .

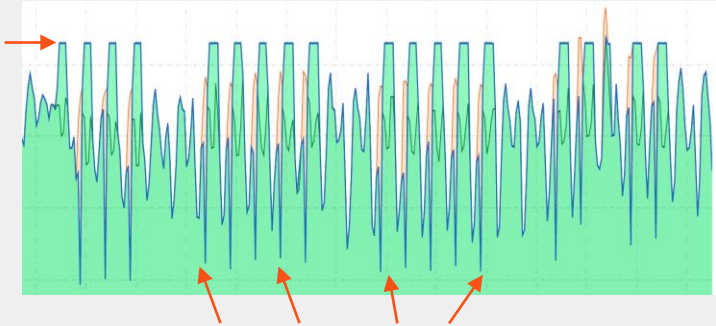
. . .steady loss of savings over time as setpoint creeps up

Under Stem Control

Optimized performance benefits customer and grid

. . .and shaves global demand peaks throughout the bill cycle

Athena determines the proper setpoint and uniformly charges. . .



. . .supports the grid with daily dispatches. . .

Its Electric Grid Under Strain, California Turns to Batteries

New York Times

"On Friday, Aug. 14, the first day California ordered rolling blackouts, Stem, an energy company based in the San Francisco Bay Area, delivered 50 megawatts — enough to power 20,000 homes — from batteries it had installed at businesses, local governments and other customers. "

stem

Industry Leading Reach And Unmatched Sales Network

Direct sales

Drives demand and “spec in” Stem solutions into enterprise procurement solicitations

Deep relationships across the Fortune 500

Sales channel partners

Sells into commercial customers

Over 1,100 channel professionals credentialed via Stem University

Distributors

Reach broad based solar, electrical, building automation, HVAC market

Distributor relationships cover entire US market

Large renewable project developers

Drive demand within project developer and financing ecosystem

Consistently delivering differentiated returns to renewable asset managers

Mitigating supply chain risk; potential oversupply

Potential oversupply could reduce prices

- Over 4x growth in lithium-ion battery manufacturing capacity in the next 3-4 years, driving potential oversupply

Taking actions to mitigate supply risk

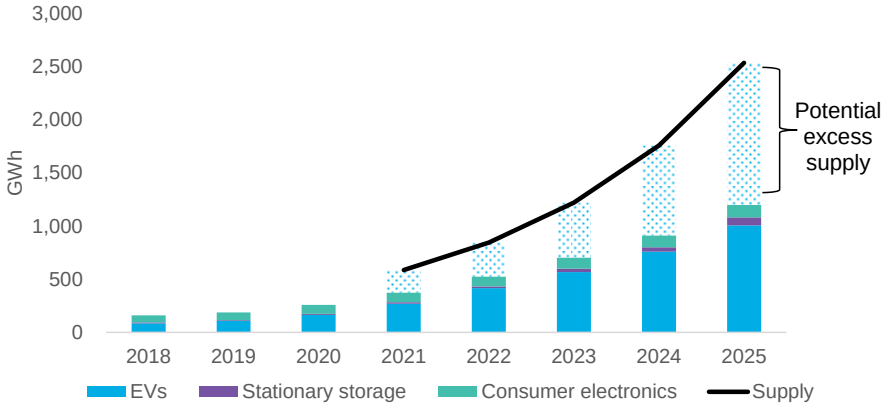
Contracting

- Contract for supply 12 months ahead
- Use balance sheet to opportunistically pre-buy equipment when capacity becomes available
- Contracts allow for quick execution of bulk purchases

Diversification

- Conduct robust annual RFP process
- Deploy alternative battery chemistries
- Expand geographic sourcing
- Connect OEM product roadmap to Stem customer needs
- Choose OEMs with component-level diversification

Potential for oversupply in 2-3 years[1]



Stem conducts a robust supplier selection process

CATL, Tesla, BYD, CanadianSolar, Samsung, PowinEnergy, Panasonic, Sungrow, LG, EVE

(1) Source: Stem analysis, Bloomberg New Energy Finance. Assumes all announced capacity comes in service on target commissioning date; does not adjust for potential start-up timing

Strong Balance Sheet Drives Expansion Opportunities

Cash Available for Growth

~$500MM

Debt on Balance Sheet

$0

Balance Sheet Strength

Supports credit requirements to help convert large projects in pipeline

Supply Chain Savings

Capital to further reduce cost structure with OEMs

Geographic Expansion

Potential expansion into rapidly growing international markets with new and existing partners

Athena Expansion & Tech Acquisitions

Product development to further extend Athena AI leadership position and accelerate roadmap

Joint Venture Opportunities

Potential to create structures to capture enhanced economics

(1) As of June 2021

Section 2

Financial Forecast

Stem Key 2021 Metrics and Seasonality

Key Metrics

As of 6/30/21			2021E	
Contracted AUM	12 Month Pipeline	Contracted Backlog	Revenue	EBITDA
1.2 GWh	$1.7 B	$250 MM	2021E: $147M	2021E: ($25M)

Revenue Seasonality

Expect 2021 Seasonality Similar to 2020 Actuals

2021E:
$147M

1Q21A	2Q21E	3Q21E	4Q21E
$15.4MM	**$19.3MM**	**20-30%**	**50-60%**

% of annual revenue

Stem poised to deliver strong long-term growth and margins

Key long-term financial drivers

- Revenue growth supported by significant TAM expansion and rapidly declining battery costs
- Strong gross margin expansion from long-duration SaaS contracts
- Partner-led sales model results in low operating and capital costs, high free cash flow
- Taking actions to mitigate supply chain risks

Long-term targets[1]

Revenue
~50% CAGR

Gross Margin
~40%

EBITDA Margin
~35%

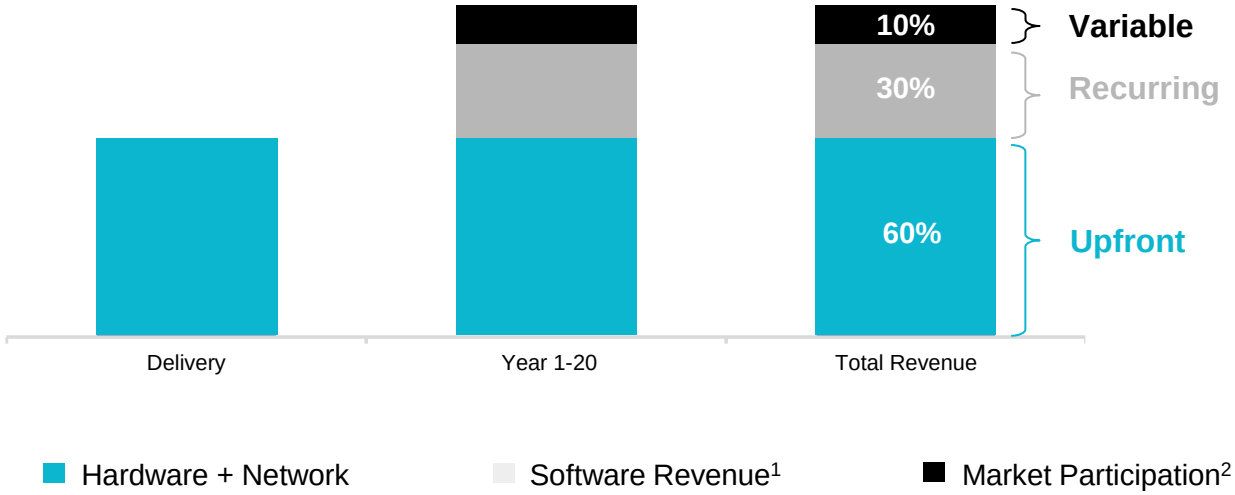
On track to meet long-term growth, margin, and FCF targets

Source: Stem. (1) Revenue CAGR: 2021E to 2026E. Gross Margin, EBITDA Margin: 2026E. See appendix for a reconciliation of Non-GAAP measures to most directly comparable GAAP measures.

Illustrative project revenue contribution

Case Study

- Front of the Meter, New York Market
- Hardware + Software
- 5 MW / 20 MWh Standalone Storage Solution
- ~$10MM customer lifetime value



Source: Stem. Note: Values estimated based on historical experience and consultant forecasts. (1) Average of $0.84 / kWh per month (Year 1-20) starting at $0.39 / kWh per month with annual escalator. (2) Average of $0.33 / kWh per month (Year 1-20).

Public Comparable Universe

	Solar Technology Solutions	Distributed Solar	Sustainable Infrastructure	Diversified Energy Tech
Stem Peers	ARRAY TECHNOLOGIES, ENPHASE, solaredge	sunnova, SUNPOWER, SUNRUN	Bloom energy, chargepoint	TESLA
Relevance to Stem	• Robust upfront cash generation • Serves similar end markets	• Diversified long-term contracted cash flows • Increasing BTM storage attachment rates	• Upfront equipment margins augmented by recurring cash flows	• Emphasis on FTM and BTM energy storage business

ESG-friendly

High growth supported by large TAM

Strong fundamental tailwinds

Scarcity premium

stem

Investment Thesis

Stem is the first pure play smart energy storage company to go public in the US

- ✓ Large Addressable Market and Strong Macro Tailwinds
- ✓ Market Leader with Industry-Leading Technology
- ✓ Strong Balance Sheet Drives Rapid Expansion Opportunities
- ✓ Highly Visible Growth
- ✓ Unique Opportunity to Gain Exposure to Energy Transition and ESG

Q&A

Supplemental Information

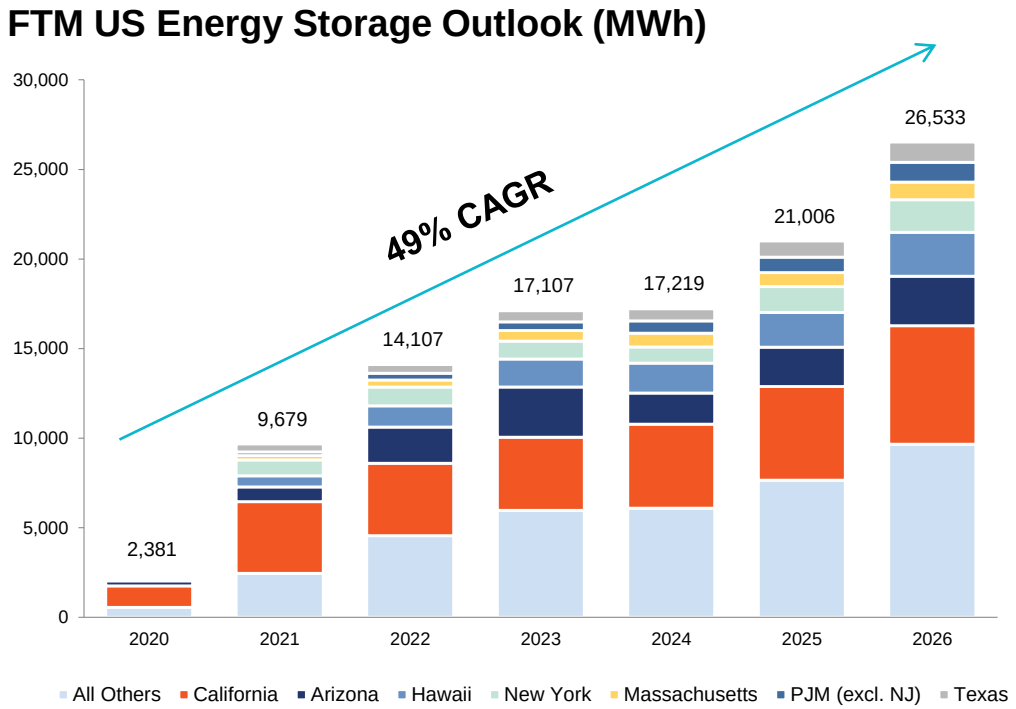
Definitions

Item	Definition
12-Month Pipeline	Total value of uncontracted, potential hardware and software revenue from opportunities currently in process by Stem direct salesforce and channel partners (see page 15), which have a reasonable likelihood of contract execution within 12 months • Market participation revenue is excluded from pipeline
Bookings	Total value of executed customer agreements, as measured during a given period (e.g. quarterly booking or annual booking) • Customer contracts are typically executed 6-12 months ahead of installation • Booking amount typically includes: 1) Hardware revenue, which is typically recognized at delivery of system to customer, 2) Software revenue, which represents total nominal software contract value recognized ratably over the contract period, 3) Market participation revenue is excluded from booking value
Contracted Backlog	Total value of bookings in dollars, as reflected on a specific date • Backlog increases as new contracts are executed (bookings) • Backlog decreases as integrated storage systems are delivered and recognized as revenue
Contracted AUM	Total MWh of systems in operation or under contract
Hardware Revenue	Payment for initial purchase of system, which is typically recognized at delivery of system to customer • Total Hardware Revenues = Total Deliveries (kWh) x Project Hardware ASP ($/kWh) • ASP / margin based on value added services including hardware selection, project design and interconnection / permitting advisory and warranty design and compliance
Software Revenue	Recurring SaaS payment driven by storage assets under management (AUM) • Total Software (Recurring) Revenues = Total AUM (kWh) x Software subscription ($/kWh/month) • SaaS contracts range 10-20 years comprising recurring monthly payments
Market Participation Revenue	Revenues from monetization of energy storage capacity into energy markets and VPPs secured by contracts ranging from 3-20 years • Total Software (Variable) Revenues = Total AUM (kWh) x Stem's Market Participation Revenues ($/kWh)

Stem has a proven track record of helping owners maximize the value of their assets, driving higher revenue and ROI

Overview of Front of the Meter Market

- Utilities, IPPs and other asset owners
- Typically 20 year software contracts
- System spec size of 27MWh and $10MM
- Wholesale market participation



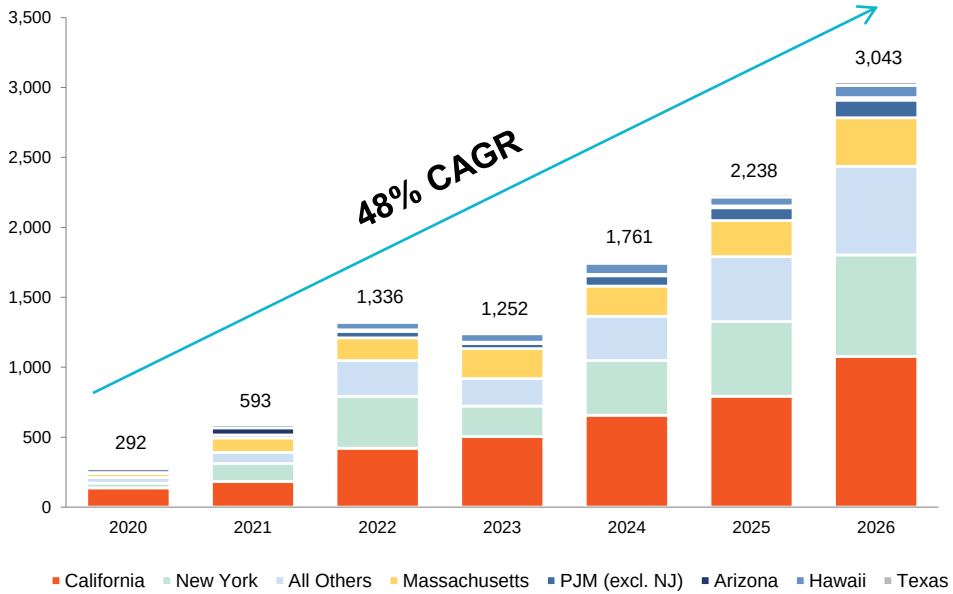
Source: EEI, Wood Mackenzie.

Stem delivers lower net bill and clean power to C&I customers

Overview of Behind the Meter Market

- Commercial, industrial and corporate customers
- Typically 10 year software contracts
- System spec size of 2.2MWh and $1MM
- Wholesale market participation

BTM US Energy Storage Outlook (MWh)



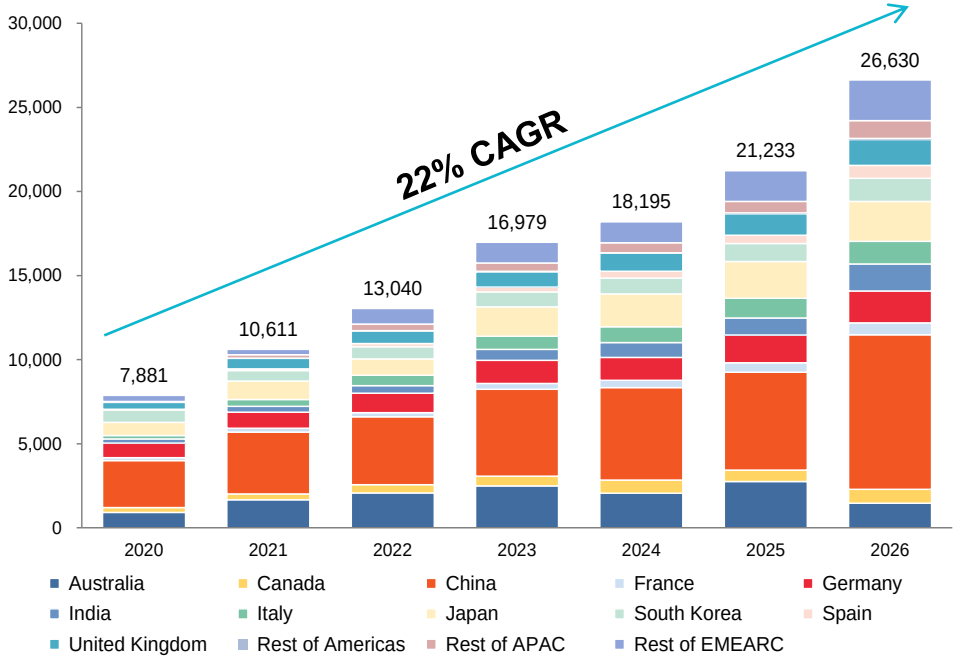
Source: EEI, Wood Mackenzie.

Transaction capital will fuel growth into international markets with expanding TAM

Overview of International TAM

- System cost declines and demand for renewable energy have led to increasing system durations and MWh capacities
- 254 GW of capacity expected to be deployed around the world over the next decade
- APAC expected to drive 70% of global demand growth through 2030
- Policy tailwinds spurs growth in EMEARC markets

Worldwide Energy Storage Outlook (Ex-US) (MWh)



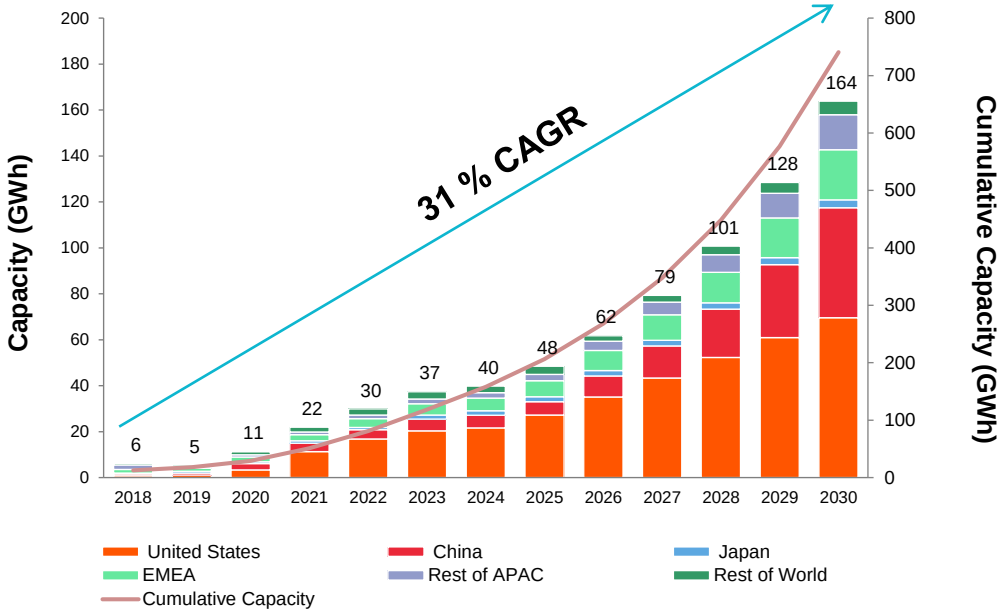
Source: EEI, Wood Mackenzie.

Global energy storage growth remains robust long-term

Overview of Global Growth Trends

- All major global markets forecasted at double digit storage growth rates over the decade
- US and China lead energy storage growth with CAGRs of ~45% and ~41% respectively through 2030
- Regulatory environment in Japan drives residential storage market with renewable growth spurring FTM storage to yield ~19% CAGR through 2030
- Lack of market rules, policies, and incentives for storage markets stifle growth in Latin America

Global Energy Storage Outlook (GWh)



Source: EEI, Wood Mackenzie.
(1) Includes all FTM, non-residential and residential storage.

Non-GAAP to GAAP reconciliations

Reconciliation of Non-GAAP Gross Margin to Gross Margin (GAAP)

$ million unless otherwise noted	Three months Ended June 30,	
	2021	2020
Revenue	$19.3	$4.4
Cost of Good Sold	($19.5)	($6.1)
GAAP Gross Margin	($0.1)	($1.7)
GAAP Gross Margin (%)	*-1%*	*-40%*
Adjustments to Gross Margin		
Amortization of Capitalized Software	$1.3	$0.9
Impairments	$0.3	$1.1
Other Adjustments	$0.7	$0.0
Non-GAAP Gross Margin	$2.1	$0.2
Non-GAAP Gross Margin (%)	*11%*	*5%*

Reconciliation of Adjusted EBITDA to Net Loss

$ thousands	Three months Ended June 30,	
	2021	2020
Net Loss	($100,216)	($18,981)
Adjusted to exclude the following:		
Depreciation and amortization	$5,236	$3,924
Interest Expense	$3,929	$5,192
Loss on extinguishment of debt	$5,064	$0
Stock-based compensation	$1,024	$476
Vesting of warrants	$9,184	$0
Change in fair value of warrants and embedded derivative	$67,179	$1,918
Provision for income taxes	$0	$0
Adjusted EBITDA	**($8,600)**	**($7,471)**
Adjusted EBITDA margin	-44%	-171%
Adjusted Net Loss % of revenue	-518%	-433%

Source: Stem.

- We define non-GAAP gross margin as gross margin excluding amortization of capitalized software, impairments related to decommissioning of end-of-life systems, and adjustments to reclassify data communication and cloud production expenses to operating expenses.
- We define Adjusted EBITDA as net loss before depreciation and amortization, including amortization of internally developed software, net interest expense, further adjusted to exclude stock-based compensation and other income and expense items, including the change in fair value of warrants and embedded derivatives.


stem