
Bloomenergy
BLOOM ENERGY VIRTUAL
ANALYST DAY 2020
WED DEC 16, 2020

FORWARD-LOOKING STATEMENTS AND NON-GAAP FINANCIAL MEASURES

This presentation contains "forward-looking" statements that are based on our beliefs and assumptions and on information currently available to us. Forward-looking statements include all statements other than statements of historical fact, including information or predictions concerning our future financial performance and financial outlook for fiscal year 2021; our business plans and objectives; potential growth and market opportunities in our base business as well as new international markets; potential growth and market opportunities in enabling technologies, including the carbon capture, biogas and marine markets; our expectations around hydrogen fuel cells, electrolyzers, and the hydrogen market; our competitive position; future technological or market trends; our anticipated roadmap; and statements regarding new applications across the energy landscape. Forward-looking statements are subject to known and unknown risks, uncertainties, assumptions, and other factors including, but not limited to, our limited operating history, the emerging nature of the distributed generation market and rapidly evolving market trends, the significant losses we have incurred in the past, our ability to service our existing debt obligations, our ability to succeed in the the hydrogen fuel cell market, the significant upfront costs of our Energy Servers and R&D costs of new products to address emerging markets, delays in the development and introduction of new products or updates to existing products, market acceptance and adoption of our products, our ability to continue to drive cost reductions, the risk of manufacturing defects, the accuracy of our estimates regarding the useful life of our Energy Servers, the availability of rebates, tax credits and other tax benefits, our reliance on tax equity financing arrangements, our ability to successfully enter new international markets, our reliance upon a limited number of customers, our lengthy sales and installation cycle, construction, utility interconnection and other delays and cost overruns related to the installation of our Energy Servers, potential supply chain constraints, business and economic conditions and growth trends in commercial and industrial energy markets, global economic conditions and uncertainties in the geopolitical environment, overall electricity generation market, the COVID 19 pandemic and other risks and uncertainties. Moreover, we operate in very competitive and rapidly changing environments, and new risks may emerge from time to time. It is not possible for us to predict all risks, nor can we assess the impact of all factors on our business or the extent to which any factor, or combination of factors, may cause actual results to differ materially from those contained in any forward-looking statements we may make.

You should not rely upon forward-looking statements as predictions of future events. Although we believe that the expectations reflected in our forward-looking statements are reasonable, we cannot guarantee that the future results, performance, or events and circumstances described in the forward-looking statements will be achieved or occur. Moreover, neither we, nor any other person, assume responsibility for the accuracy and completeness of the forward-looking statements. We undertake no obligation to update any forward-looking statements for any reason after the date of this presentation to conform these statements to actual results or to changes in our expectations, except as required by law. These forward-looking statements should also be read in conjunction with the other cautionary statements that are included elsewhere in our public filings, including under the heading “Risk Factors” in our Annual Report on Form 10-K for the year ended December 31, 2019, our Quarterly Report on Form 10-Q for the quarter ended September 30, 2020 and subsequent filings with the SEC filed from time-to-time.

This presentation also includes certain historical, and in prospective, non-GAAP financial measures related to gross margin and operating margin. These non-GAAP financial measures are in addition to, and not a substitute for or superior to, measures of financial performance prepared in accordance with U.S. GAAP. There are a number of limitations related to the use of these non-GAAP financial measures versus their nearest GAAP equivalents. For example, other companies may calculate non-GAAP financial measures differently or may use other measures to evaluate their performance, all of which could reduce the usefulness of our non-GAAP financial measures as tools for comparison. A reconciliation of the historical non-GAAP measures used in this presentation to our GAAP results for the relevant period can be found in the Appendix to this presentation.

With respect to our expectations regarding “Preliminary FY2021 Financial Metrics Outlook” and other long-term financial targets, we are not able to provide a quantitative reconciliation of non-GAAP gross margin and operating margin measures to the corresponding gross profit and gross profit percentage without unreasonable efforts.

FINANCIAL OVERVIEW

Greg Cameron
Executive Vice President
Chief Financial Officer

2020 YEAR-TO-DATE FINANCIAL PERFORMANCE

	3Q YTD	YoY
Acceptances	876	+8%
Revenue	$545	(5%)
Non GAAP Gross Margin %*	21.3%	+2pts
Non GAAP Operating Income*	($19)	+24%
Adjusted EPS*	($0.61)	+$0.17

Issued $230 Million Green Bond;
Eliminated High Cost / Short Term Debt

Record Number of Acceptances;
Ramping Volume in the Second Half

Cost Reductions Driving **Improved Profitability**

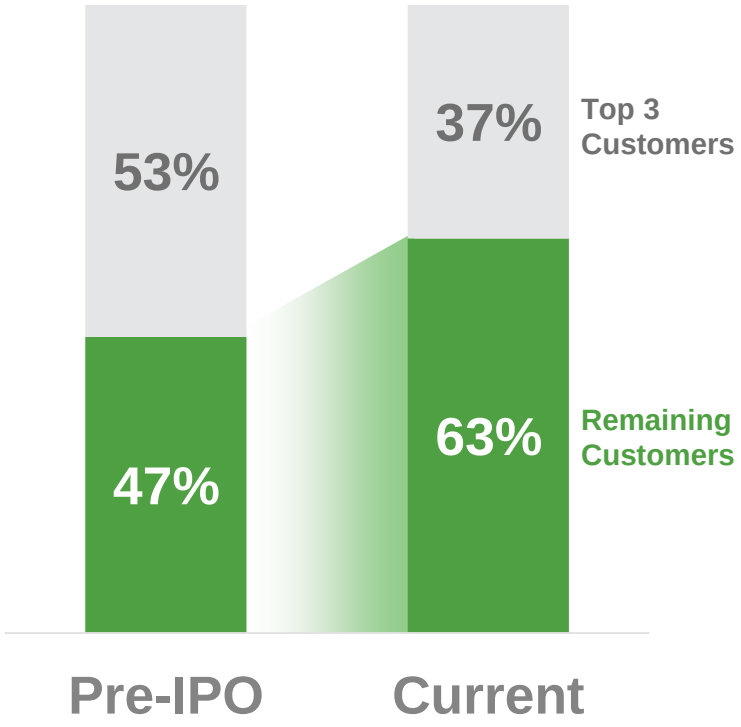
Operating Income **Gaining Momentum**

Note: Dollars in millions, except per share figures and percentages
* See reconciliation of GAAP to non-GAAP in appendix to slide deck presentation

OUR BUSINESS IS INCREASINGLY RESILIENT

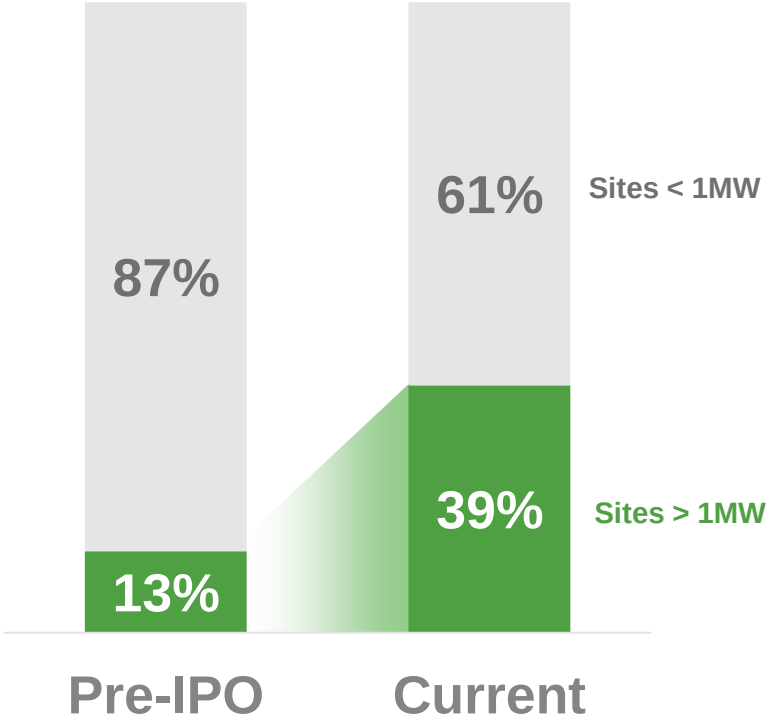
We Have Diversified Our US Customer Base

(% of Total Acceptances)



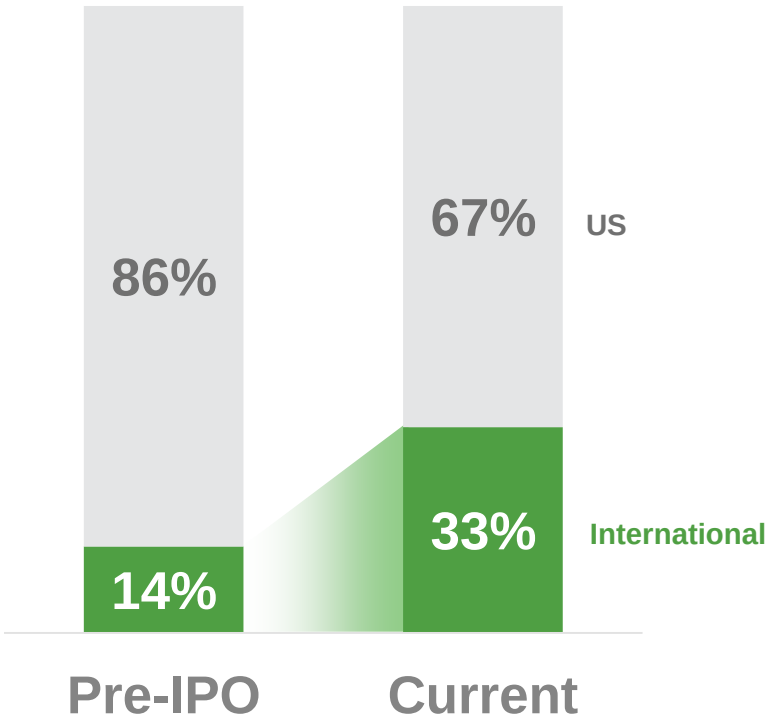
We Are Landing Larger US Sites

(% of Total Sites)



We Are Expanding Internationally

(% of Product and Install Revenue)



Note: Pre-IPO represents 2016-2017, current represents 2019-2020YTD.

PRELIMINARY FY2021 FINANCIAL METRICS OUTLOOK

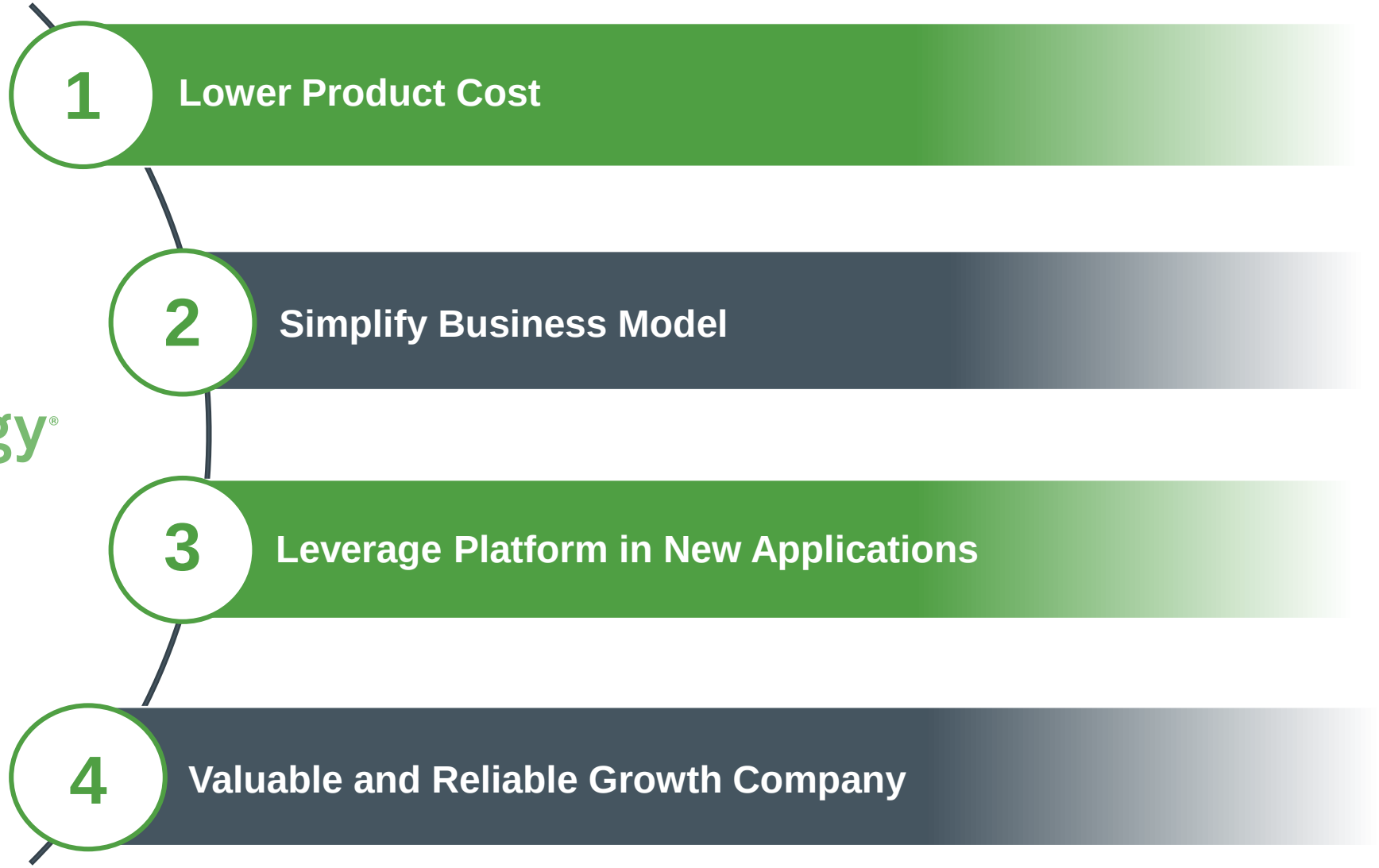
Metric		*YoY Change*
Revenue	$950mm to $1bn	*+25%*
Non GAAP Gross Margin %*	~25%	*+3pp*
Non GAAP Operating Margin %*	~3%	*Fav.*
Cash Flow from Operations	Approaching Positive	*Fav.*

- **High project visibility** with backlog and pipeline
- Manufacturing **capacity in place** to meet demand
- International and product **expansion opportunities**

✓ **Bloom strongly positioned for ‘21**

* Non-GAAP financial measures exclude stock based compensation

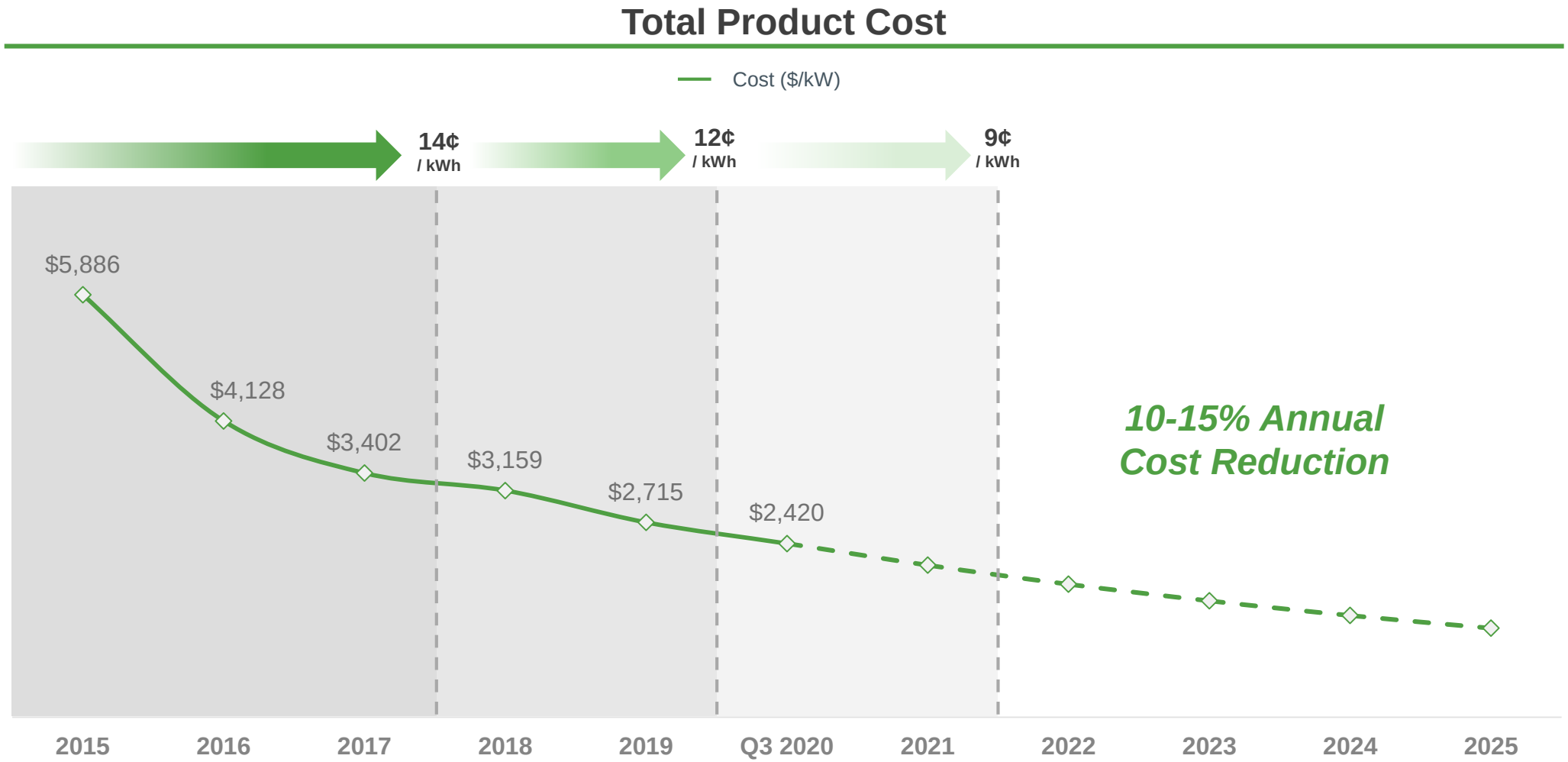
DRIVERS OF LONG-TERM SUCCESS



Bloomenergy®

1

DRIVING THE COST CURVE: ~60% REDUCTION IN COST SINCE 2015



Note: Product Cost numbers are as of respective period ends. Cost/kWh is the cost of electricity for a 15 year PPA. All variables other than cost constant. Electricity price represents offered price for future installs. For future COE assumptions, see footnote 5 in the Appendix.

2

SIMPLIFYING OUR BUSINESS MODEL

Leverage Strategic Partnership

- Market access / local expertise
- Technology co-development
- Installation / service
- Financing

Highly-successful partnership with SK E&C provides a replicable reference point

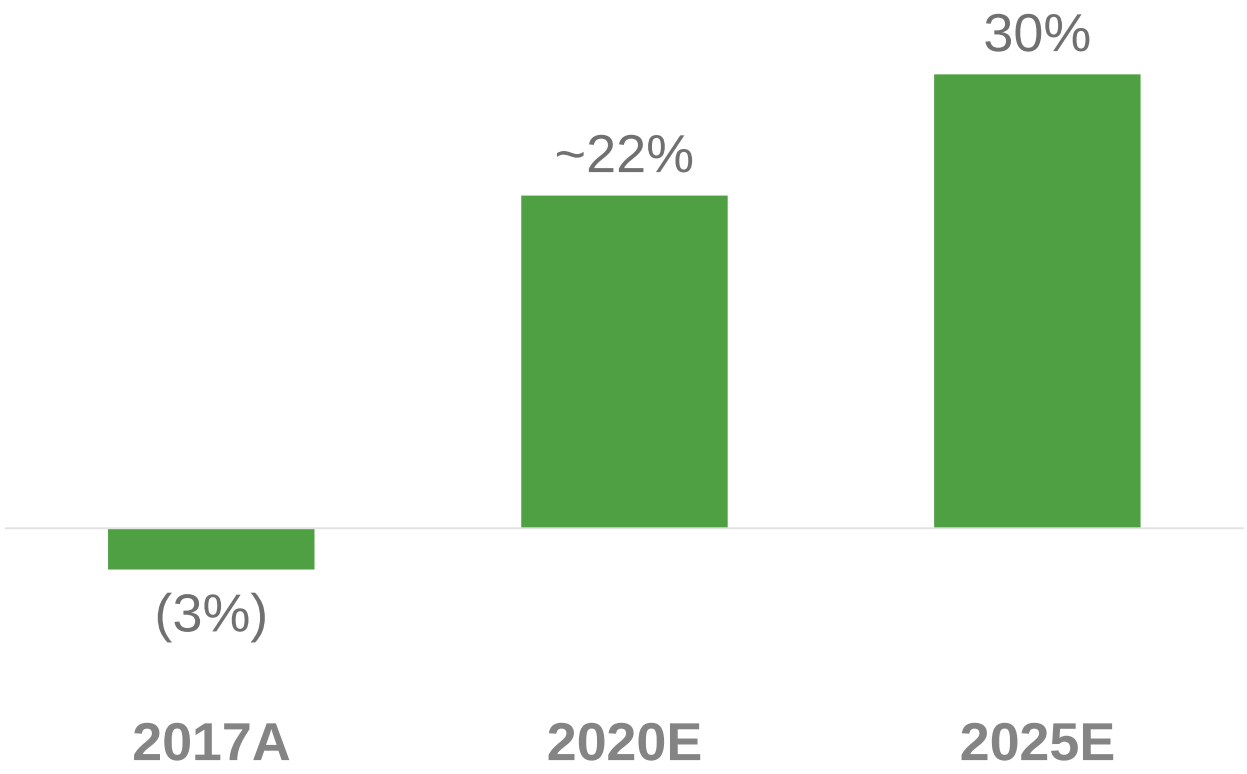
Drive Operational Advancement

- Installation process
- Go to market process
- Service model profitability
- Manufacturing technology & scale

Recent innovation of preassembled, skid-mounted product to simplify installation process

2a

TARGETING 30% NON-GAAP GROSS MARGINS*



Product

Investments in Advanced Manufacturing

Maintain 40%

Services

Fleet Optimization / Replacement Costs / Predictive Analytics

Profitable by 2022 → 20% Long-Term Margin

Installations

Streamline Process (Partnerships and Skid Delivery)

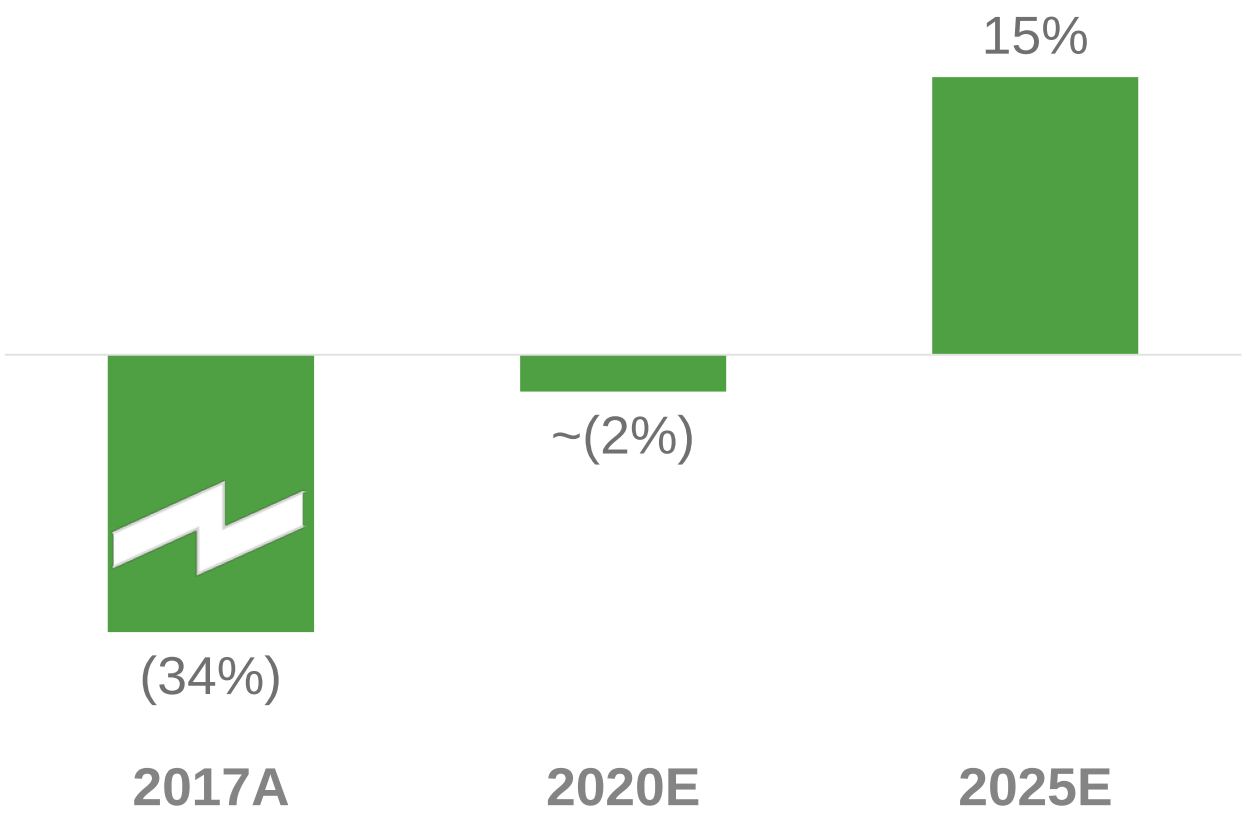
Anticipate Breakeven by 2022

Cost, Capacity, Quality

*Non-GAAP financial measures exclude stock based compensation. see appendix for reconciliation of GAAP to non-GAAP for 2017A.

2b

TARGETING 15% NON-GAAP OPERATING MARGINS*



R&D

Platform Technology Requires Little Incremental Investment

Anticipate 8% of Revenue by 2025

SG&A

Ramping Sales Push Offset by Prudent Spending

Best-Practice Operational Improvements

Anticipate 7% of Revenue by 2025

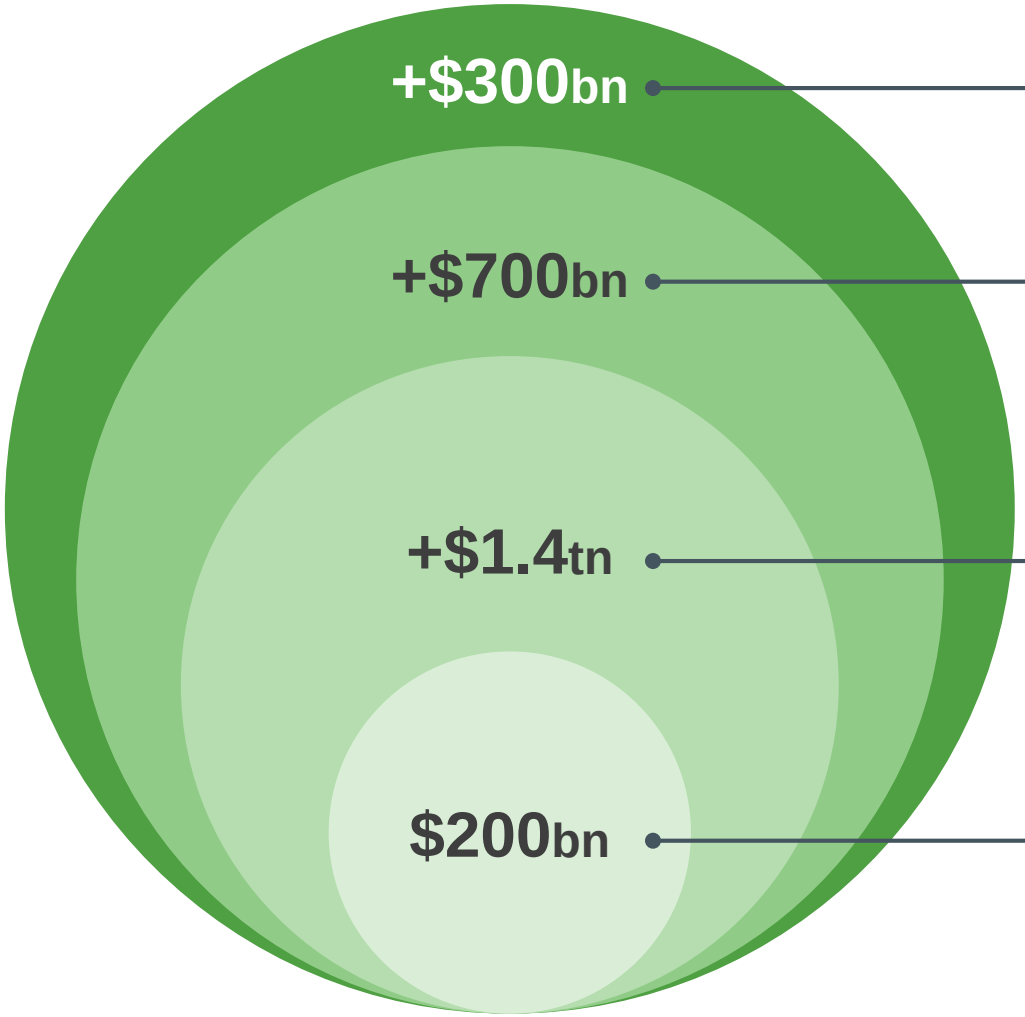
Operational Efficiency and Platform Leverage

* Non-GAAP financial measures exclude stock based compensation. see appendix for reconciliation of GAAP to non-GAAP for 2017A.

NEAR-TERM INITIATIVES ACROSS NEW AND EXISTING MARKETS

>$2tn

Total Addressable Market



Hydrogen

- Deliver 100kW of hydrogen-powered fuel cells this month
- Won 1.8MW RFP in South Korea, delivery beginning 2021
- Expect to deliver SOECs to power hydrogen SOFC in S. Korea in 2022

Enabling Technologies

- Anticipated demonstration of CCUS in 2021
- Anticipated deployment of biogas units in 2021
- Anticipated 300MW annual opportunity in Marine Transport

International Expansion

- Recently hired new business development lead
- Pursuing new partnerships to expand geographic reach

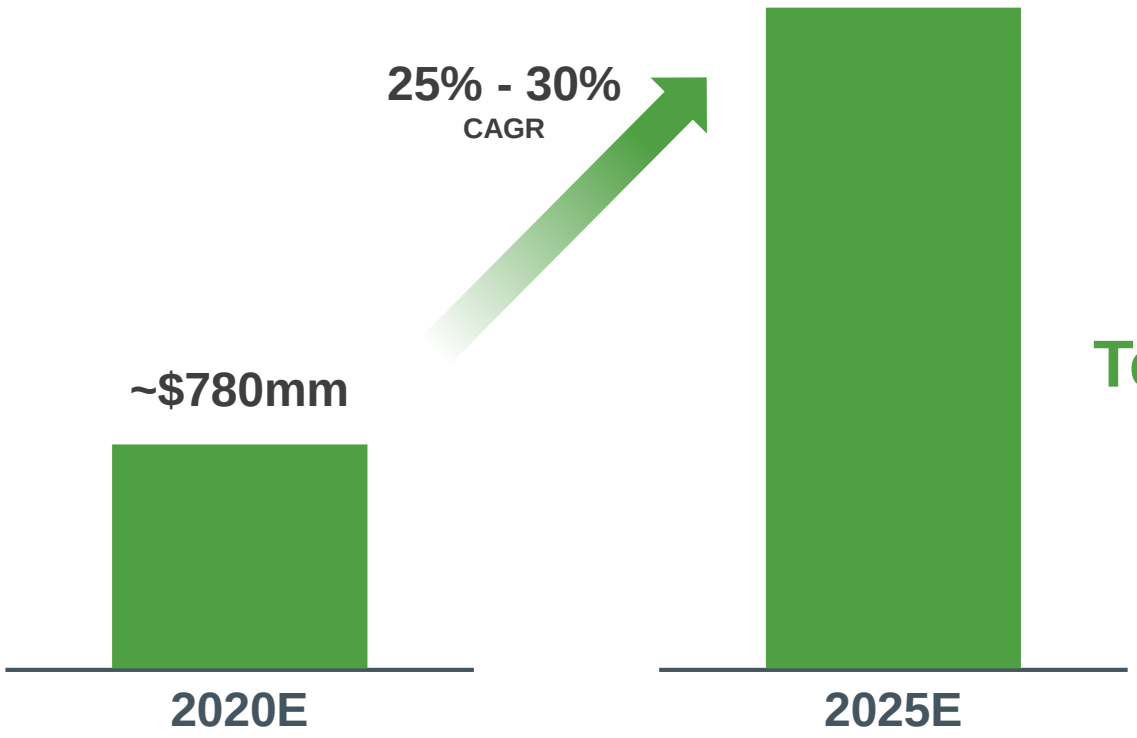
US C&I

- Drive down product cost to expand geographic opportunity set
- Improve installation speed and efficiency
- Optimize go-to-market model / increase sales velocity

Note: for TAM sizing references, see footnotes 2, 3, 4 and 7 in the Appendix.

4

VALUABLE AND RELIABLE GROWTH COMPANY



Growth Algorithm

Base

Strong **Growth in Base Fuel Cell** by Expanding Map

Enabling Technologies

Marine, Biogas, Carbon Capture **Accelerate Growth**

Hydrogen

Significant Market Developing for Fuel Cells and Electrolyzers

LONG TERM GROWTH MODEL

25% - 30%
CAGR

Revenue Growth (through 2025)

Base Revenue Growth Augmented by Hydrogen and Enabling Technologies

30%

Non-GAAP Gross Margin* (by 2025)

Defend Product Profitability + Increase Contribution of Services and Installation

15%

Non-GAAP Operating Margin* (by 2025)

Platform Technology Enables Asymmetric Investment to Payoff Ratio

Algorithm Validated By Strong Performance

*Non-GAAP financial measures exclude stock based compensation

KEY MILESTONES FOR 2021: OPERATIONALIZING OUR GROWTH STRATEGY

- Operationalize Manufacturing of Bloom 7.5
- Establish a New International Partnership
- Deliver a Hydrogen Fuel Cell and an Electrolyzer
- Invest in Growth: Technology, Marketing and Sales
- Continue Cost Reductions: Down Another 10%-15%
- Build Additional Manufacturing Capacity to Support 2022+ Growth

A VALUABLE COMPANY

Platform Technology

High Growth

Cash Generative

Bloom Energy is Poised for the Next Chapter in the Future of Energy

Bloomenergy

ENABLING GROWTH

Sharelynn Moore
EVP, Chief Marketing Officer

MASSIVE ENERGY TRANSITION IS UNDERWAY

"Climate change is the **defining issue of our time**, and we are at a **defining moment**"

-- United Nations

$69 trillion

of infrastructure **investment** required through 2030(1)

The biggest **transformation** since

Edison's light bulb

Notes: see Footnotes slide in the Appendix for citations.

THE FLYWHEEL IN EFFECT

MACRO FORCES

Climate creating resiliency need

Climate Events Increasing in Intensity and Frequency

Be

AlwaysON

Power

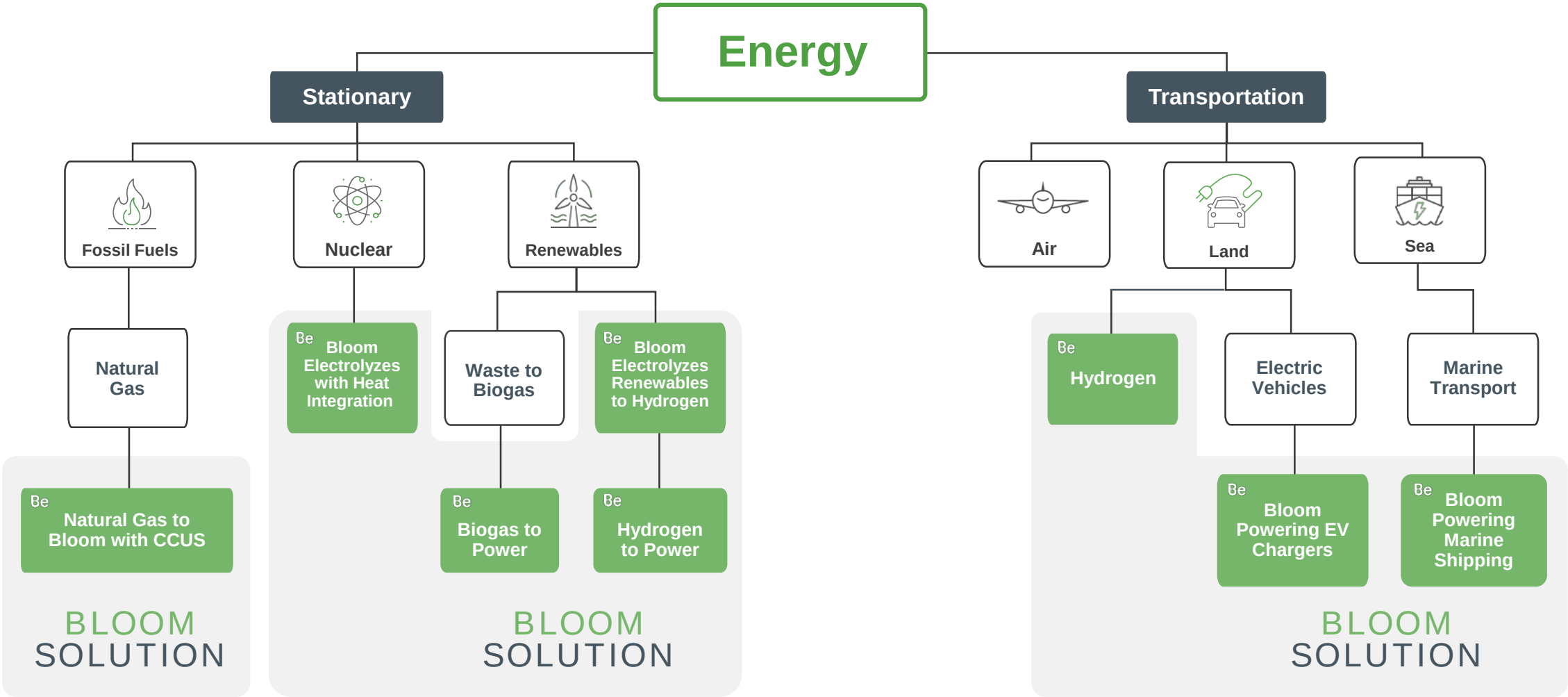
Climate concerns driving decarbonization

Domestic and International Climate Goals

Be

Zero / Negative Carbon Over Time

BROAD SET OF APPLICATIONS ACROSS THE ENERGY LANDSCAPE



EXPANDING THE BASE BUSINESS

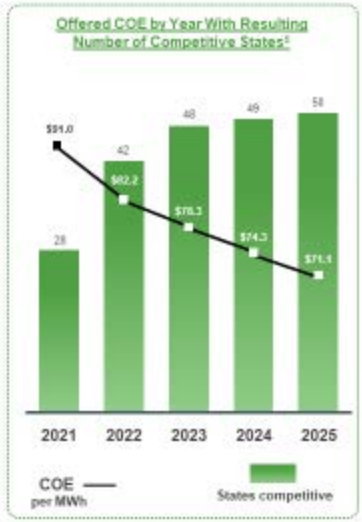
TAM[2]

INCREASED SCALE DRIVES LOWER COSTS, WHICH OPENS NEW MARKETS

Key enabler:

28%

Learning Rate



$200+ Billion

US C&I TAM By 2025[6]

4x

Increase in TAM vs. today[7]

Cost Reduction Expands Opportunity

Focus on Resiliency to Create Additional Value

Provide a Pathway to De-Carbonization

Notes: see Footnotes slide in the Appendix for citations.

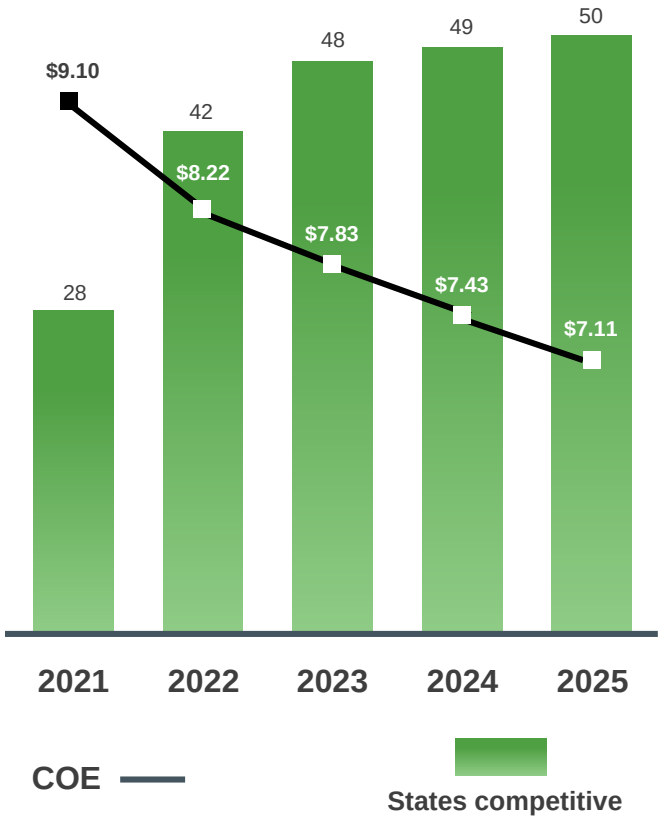
INCREASED SCALE DRIVES LOWER COSTS, WHICH OPENS NEW MARKETS

Key enabler:

28%

Learning Rate

Offered COE by Year With Resulting Number of Competitive States[5]



$200+

Billion

US C&I TAM

By 2025(6)

4x

Increase in TAM

vs. today(7)

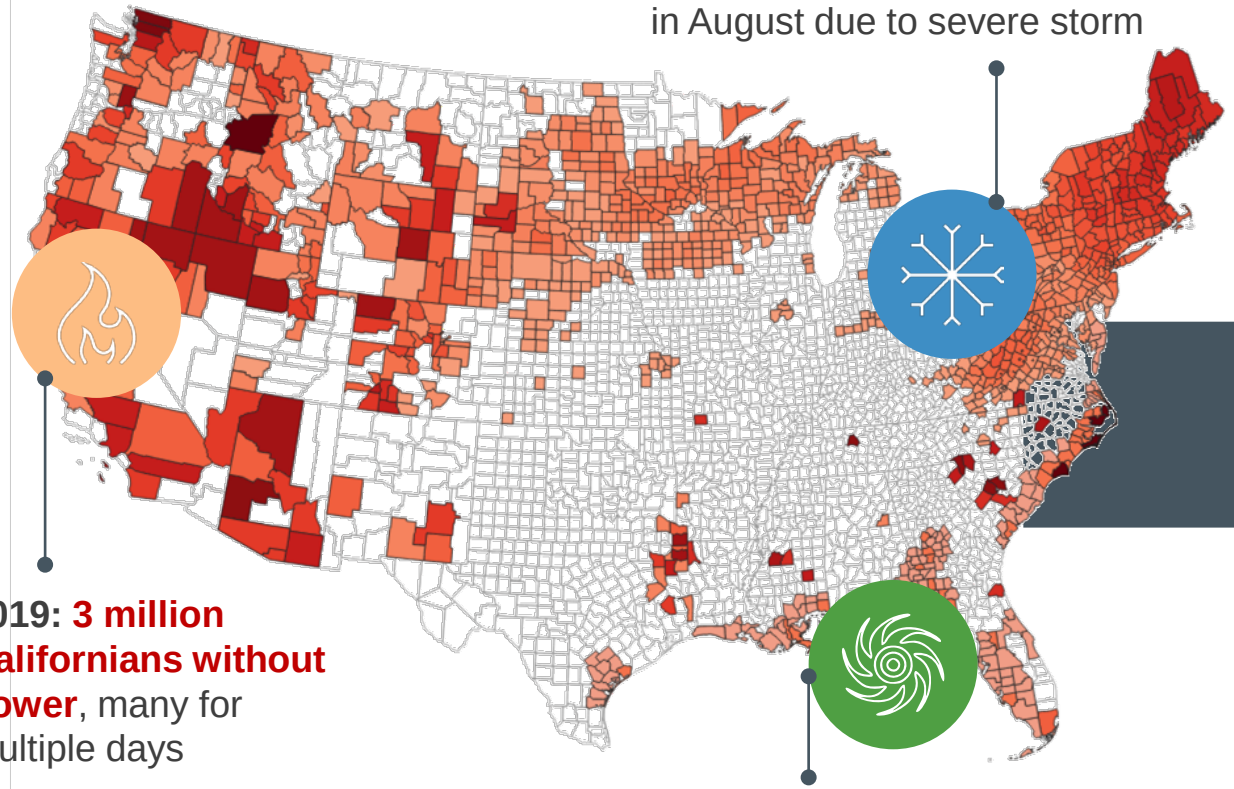
Notes: see Footnotes slide in the Appendix for citations.

SCALING OUR US BUSINESS – RESILIENCY INCREASINGLY CRITICAL

US Hazard Map[8]

Natural Disasters Drastically Disrupting the Energy Grid

2020: 1.9 million lost power in August due to severe storm



2019: 3 million Californians without power, many for multiple days

2020: Isaias and Zeta left **6.8 and 2.6 million without power**, respectively

Resiliency Drives additional value[9]

$15-$30

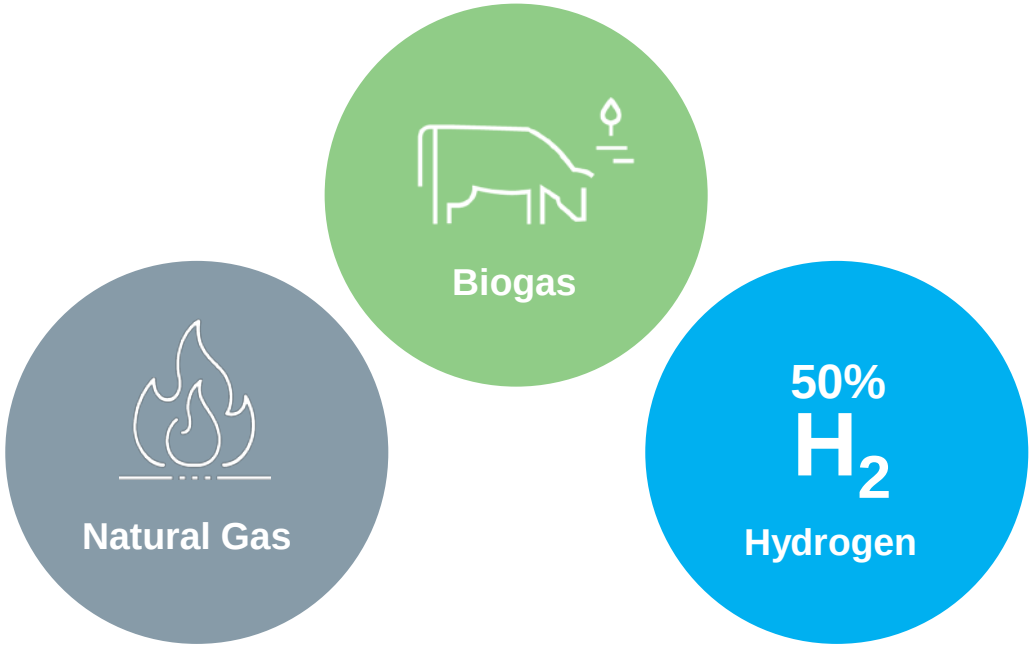
per MWh

Premium vs. Standard Grid Costs

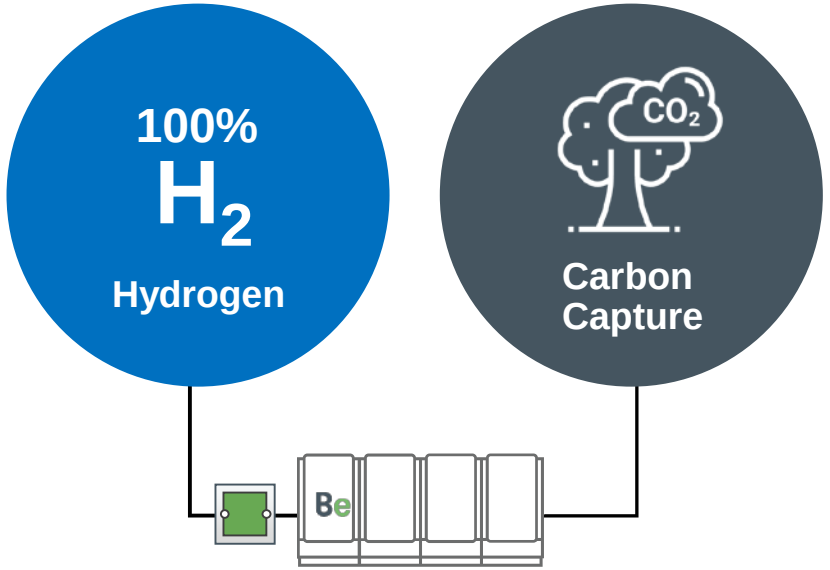
Notes: see Footnotes slide in the Appendix for citations.

UPGRADE CYCLE: SIMPLE MODULE ENABLES DECARBONIZATION

Fuel Flexible Today



Fuel Migration Tomorrow



Simple Field Upgrade

SOUTH KOREA – A LEADER IN DECARBONIZATION

Significant Market Opportunity

600MW[10]
Korea National (MOTIE) Target Fuel Cell Deployment by 2022

400MW[11]
Annual Korea Bookings Target Once Hydrogen Fully Ramped

Keystone Partner

- Product advocates
- Operations support
- Installation team

Our go-to market strategy leverages a **resource-light**, **partner-led model**

Early Wins in De-Carbonization

- Shipping 100% Hydrogen-powered fuel cells **this month**
- Expect to ship Hydrogen Electrolyzers **in 2021**

Changwon RE 100

Won Project to Supply 100% Hydrogen-Powered Fuel Cells and Electrolyzers

Great Track Record

150MW
Delivered to Date

Notes: see Footnotes slide in the Appendix for citations.

ACTIVATING OUR STRATEGY THROUGH SALES AND MARKETING

Sales

Specialized sales team and focus on larger deals

Partners

Increasing pipeline and accelerating the sales cycle

Brand Leadership

Building CXO-Level Awareness

Augmented Sales and Marketing Approach Enables Sophisticated Go-To-Market Motion

SIMPLE ADD ON MODULE ENABLES CARBON CAPTURE

Hardware already in operation
Produces ~99% pure CO2

Carbon Capture
(Sequestered or Utilized)

Zero or Negative Carbon Power

Carbon Capture Module Enables Zero or Negative CO2 Power

BIOGAS MARKET MOMENTUM IS BUILDING

1st Project Under Construction

"We're excited about our partnership with Bloom Energy. We see significant opportunity utilizing **Bloom's ultra clean and efficient technology** to convert our dairy biogas to renewable electricity and low carbon electric fuel credits. Our joint development with Bloom over the past year has gone well, and we're now constructing two dairy biogas fuel cell projects for commercial launch 2021. These initial project's will allow us to **demonstrate significant dairy benefits and investor returns** enabling us to deliver dozens of additional projects throughout California and subsequently world-wide."

-- N. Ross Buckenham
CEO of CalBio

Enabling a Large Market

$45 Billion

US Biogas Market TAM(12)

10x

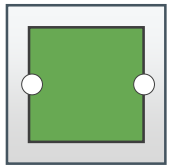
Biogas Production Increase in 20 Years(13)

Notes: see Footnotes slide in the Appendix for citations.

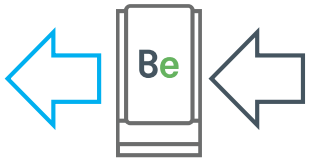
HYDROGEN

TAM[4]

$300 BILLION



Hydrogen Fuel Cells



Electrolyzer

Notes: see Footnotes slide in the Appendix for citations.

BLOOM'S HYDROGEN PLATFORM

Unique Platform and Advantages

Superior Cost and Performance

31%
Greater
Efficiency Potential vs. Other Technologies[14]

<$600/kW
Cost Potential based on Historical Performance[15]

Ready for Growth – 2025 Vision

1GW
Capacity Potential[15]

$750MM
Revenue Target[15]

Notes: see Footnotes slide in the Appendix for citations.

MARINE MARKET OPPORTUNITY

IMO Sets Emission Targets[16]

40%

by 2030

-- Initial IMO GHG strategy

Bloom's highly efficient SOFC already ***aligned with the IMO's 2050 environmental targets***

Joint Agreement with SHI Announced June 2020

SAMSUNG

SAMSUNG HEAVY INDUSTRIES

"Our goal is to ***replace all existing main engines and generator engines*** *with these highly efficient solid oxide fuel cells..."*

-- Haeki Jang, Vice President, Shipbuilding & Drilling Sales Engineering, SHI

Opportunity Ahead[17]

300MW+

"Bloom Energy and SHI estimate that replacing oil-based power generation on large cargo ships, which require up to 100 megawatts of power per ship, could ***reduce annual greenhouse gas emissions from shipping by 45 percent****"*

-- Bloom Energy

Notes: see Footnotes slide in the Appendix for citations.

INTERNATIONAL EXPANSION BEYOND SOUTH KOREA

EVP
International Business Development

Azeez Mohammed

Mission

With the international business development team under Azeez's leadership, we are **actively adding new geographies** where we can replicate our successes in US and Korea

Prior Experience

CEO and President
Power Conversion, Power Services, and Energy Services Business

(1998 – 2019)

+$1.4 TRILLION

TAM Opportunity from International Expansion(2)

Notes: see Footnotes slide in the Appendix for citations.

ANTICIPATED ROADMAP


Bloomenergy
THANK YOU
BLOOM ENERGY VIRTUAL
ANALYST DAY 2020

APPENDIX: GAAP TO NON-GAAP RECONCILIATION GROSS MARGIN AND OPERATING INCOME

In $ millions	3QYTD'20	3QYTD'19
Revenue	$545	$572
Gross Profit	$102	$73
Stock-based compensation – COGS	$14	$37
Non-GAAP Gross Profit	$116	$110
Non-GAAP Gross Margin %	21.3%	19.2%
OPEX	($178)	($258)
Stock-based compensation – OPEX	$43	$123
Non-GAAP Operating Income	($19)	($25)

APPENDIX: GAAP TO NON-GAAP RECONCILIATION ADJUSTED EPS

In $ millions	3QYTD'20	3QYTD'19
Net loss to Common Stockholders	($130)	($239)
Loss for non-controlling interests	($17)	($14)
Gain (loss) on extinguishment of debt	$13	$0
Gain (loss) on warrant & derivatives liabilities	($2)	$2
Fair Value Adjustments for certain PPA contracts	($0)	$1
Stock-based compensation	$57	$160
Adjusted Net Loss	($79)	($89)
Adjusted EPS	**($0.61)**	**($0.78)**
Pro forma weighted average shares outstanding attributable to common, Basic and Diluted	130	115

APPENDIX: GAAP TO NON-GAAP RECONCILIATION FY'17

In $ millions	FY'17 GAAP	FY'17 SBC*	FY'17 Non-GAAP
Revenue	**$366**		**$366**
COGS	$382	($6)	$376
Gross Profit	($16)	$6	($10)
Gross Margin %	**-4%**		**-3%**
OPEX	$139	($23)	$116
Operating Income	($155)	$29	($126)
Operating Income Margin %	**-42%**		**-34%**

APPENDIX: FOOTNOTES

1. Source: UN Financing Climate Futures – Rethinking Infrastructure. See https://www.oecd.org/environment/cc/climate-futures/.

2. See Bloom's S-1: "According to data from MarketLine, the total addressable market (TAM) for electricity at the point of customer consumption was approximately $2.4 trillion in 2016. Of this market, MarketLine determined that 68% consisted of commercial, industrial and public services (CI&P), or $1.6 trillion." Net of the $200 billion TAM in US C&I, the result for the rest of world is $1.4 trillion.

3. The total TAM of $700 billion is comprised of $140 billion for biogas, $165 billion for marine, $335 billion for carbon capture and $55 billion for BEV chargers. Calculations based on publically available data and BE estimates regarding the appropriate sales prices given estimated volumes.

4. Based on calculated prices at historical learning curve rates. See Bloom's Hydrogen Day Teach In, dated 11/18/2020, pg. 13.

5. Based on Bloom Energy's historical learning curve rate and growth assumptions used to calculate product and service costs; install costs assumed to decline at 10% learning rate. Assumes 20 year projects; and that ITC is extended to 2025. PPA rates escalate at 2% per annum and are inclusive of natural gas costs of $0.035/kWh. Offer price assumed to be two years ahead of acceptance given sales and installation cycle times. Cost of grid power based on EIA data; data set includes commercial and industrial cost of electricity in all 50 US States; forward years assume 4% annual growth rate in power prices; market sizing based on commercial and industrial revenues by state; market considered unlocked when Bloom starting PPA rates fall below state's grid cost.

6. Estimate based on EIA data and reported power sales by state.

7. Increase based on the number of states in which we are competitive in 2020 (nine at a $49 billion TAM) versus a TAM of $204 billion for all 50 states.

8. Based on McKinsey Climate Risk Analytics. Source data from: NOAA, ECMWF, and US Forest Service. Hurricane and wind event data are from NOAA, snow data from ECMWF, and fire data from the USFS.

9. Based on the incremental cost required to firm grid power by buying diesel generators; higher values reflect the higher cost associated with diesels operating over multi-day outage events.

10. See the 8th Electricity Supply and Demand Plan from the South Korean Ministry of Trade, Industry, and Energy (MOTIE).

11. See: https://www.businesswire.com/news/home/20200715005286/en/Bloom-Energy-Announces-Initial-Strategy-for-Hydrogen-Market-Entry.

12. See: https://americanbiogascouncil.org/biogas-market-snapshot/ as of 12/10/2020.

13. Source: https://www.iea.org/data-and-statistics/charts/outlook-for-global-biogas-consumption-by-sector-in-the-sustainable-development-scenario-2018-2040.

14. See Bloom's Hydrogen Day Teach In, dated 11/18/2020, pg. 4.

15. See Bloom's Hydrogen Day Teach In, dated 11/18/2020, pg. 17.

16. See: International Maritime Organization at https://www.imo.org/en/MediaCentre/HotTopics/Pages/Reducing-greenhouse-gas-emissions-from-ships.aspx.

17. See: https://www.bloomenergy.com/newsroom/press-releases/bloom-energy-and-samsung-heavy-industries-team-up.