



# SERVICE BUSINESS TEACH-IN



**Greg Cameron**

Executive Vice President,  
Chief Financial Officer



**Glen Griffiths**

Executive Vice President,  
Services, Quality, Reliability and EH&S

# 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 expectations regarding our services business; potential growth of our service business; projected service gross margin; and our business plans and objectives. 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 new markets, 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.

With respect to our expectations regarding our service gross margin target, we are not able to provide a quantitative reconciliation of non-GAAP gross margin measure to the corresponding GAAP measures without unreasonable efforts. The only difference between GAAP and non-GAAP is the exclusion of stock-based compensation.

# BLOOM ENERGY'S SERVICE BUSINESS AT A GLANCE

**\$3.4B**

*Service Backlog<sup>1</sup>*

**~\$150M**

*2021 Service  
Revenue Estimate*

**~40%**

*2021 YoY Revenue  
Growth Estimate*

**20%**

*New Service Contract  
Gross Margin Target*

---

**100%**

*Service Contract  
Attach Rate*

**>650**

*Unique Sites Globally with  
Bloom Power Modules*

**15 Years**

*Average Remaining  
Contract Term*

**>5 Years**

*Useful Life of Latest Bloom  
Power Modules*

# SERVICE OFFERING OVERVIEW

## Remote Monitoring and Diagnostics



- 24/7 remote monitoring
- Fleet performance optimization (power, efficiency, reliability)
- Analytics and field service dispatch

**~10%**  
of Service Cost

Installed Base



Unit Fixed Cost

## Parts and Labor (Level 1)



- Preventive maintenance (filters and adsorbents)
- Minor repair and replacements (fans, blowers and electronics)

**~25%**  
of Service Cost

Life, Reliability, Reuse



Cost

## Power Modules (Level 2)



- Removal and replacement
- Repair and overhaul
- Refurbishment

**~65%**  
of Service Cost

# VALUE PROPOSITION

## Value to Bloom Customers

*Always-on Power / Availability*

*Performance Certainty  
(Availability, Power and Efficiency)*

*Reliable, Long-Term Partner*

*Access to Latest Fuel Cell Technology Updates*

**Incentives  
Aligned**

## Value to Bloom

*Annuity-Based Income*

*Ability to Expand Margins through  
Cost-Out, Upgrade and Refurbishment Pipeline*

*Contractual Availability Commitments Based on  
Intersection of Customer Needs and  
Bloom's Ability to Deliver*

*Closeness to Customer, Understanding of  
Evolving Customer Needs*

**Value to Customers Delivered via Reliable, Always-On, Resilient Power**

# KEY DRIVERS OF OUR SERVICE PERFORMANCE

**1** **Power Module Life**

- Power module installed life
- Beginning of life efficiency and rate of degradation
- More power per unit = fewer units

**2** **Unit Cost**

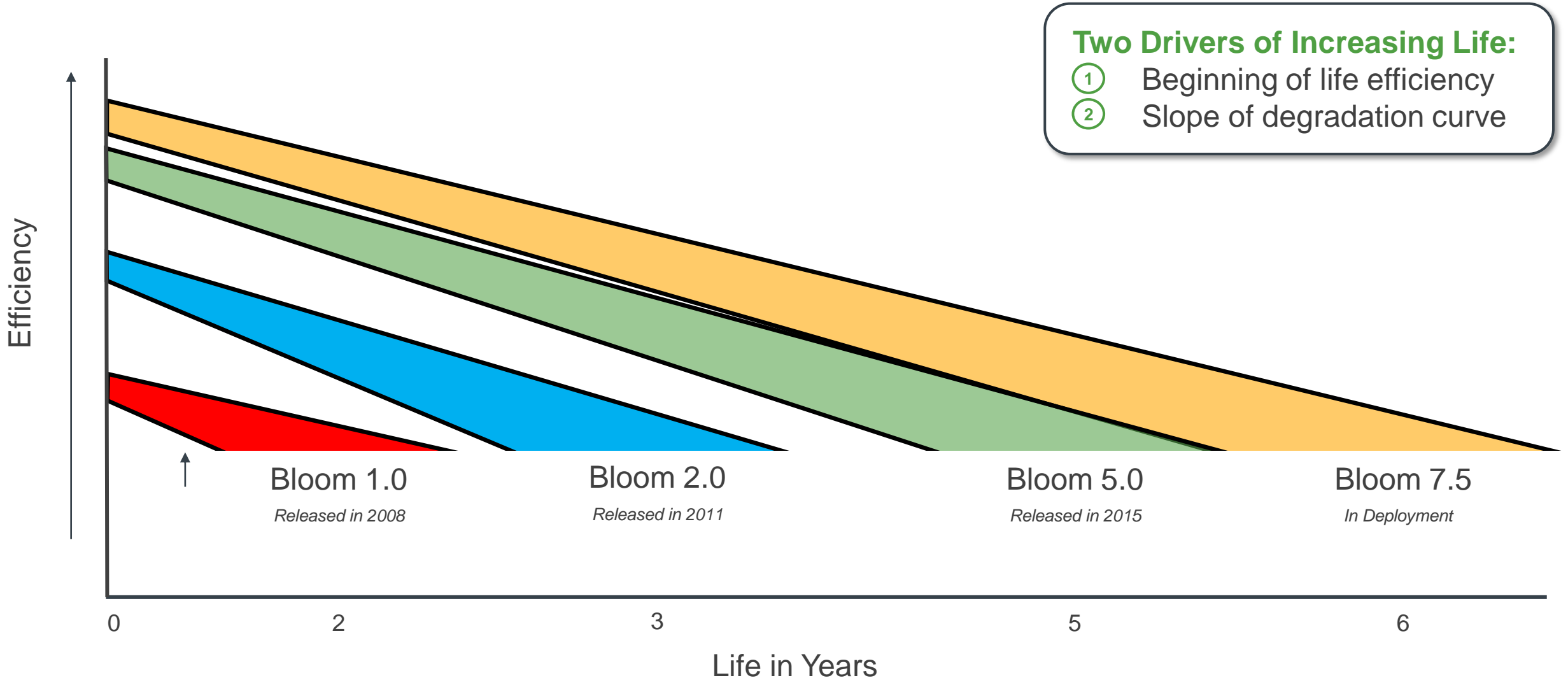
- Power module replacement cost
- Replacement with a new or refurbished system

**Bloomenergy**<sup>®</sup>  
*Service Cost*

**Expected to be Profitable in 2021 and 20% Target Gross Margin by 2025**

# 1

# POWER MODULE LIFE



# 1

## POWER MODULE LIFE DRIVES MARGIN EXPANSION

### Lifetime Service Gross Margin Assuming 15-Year Contract

Initial Power Module Generation

Bloom 1.0

2008-11

Bloom 2.0-2.5

2011-16

Bloom 5.0

2015-22

Service Gross Margin

(20%)

0%

20%

% of Fleet MW

<1%

Decreasing



24%

Decreasing



75%

Increasing

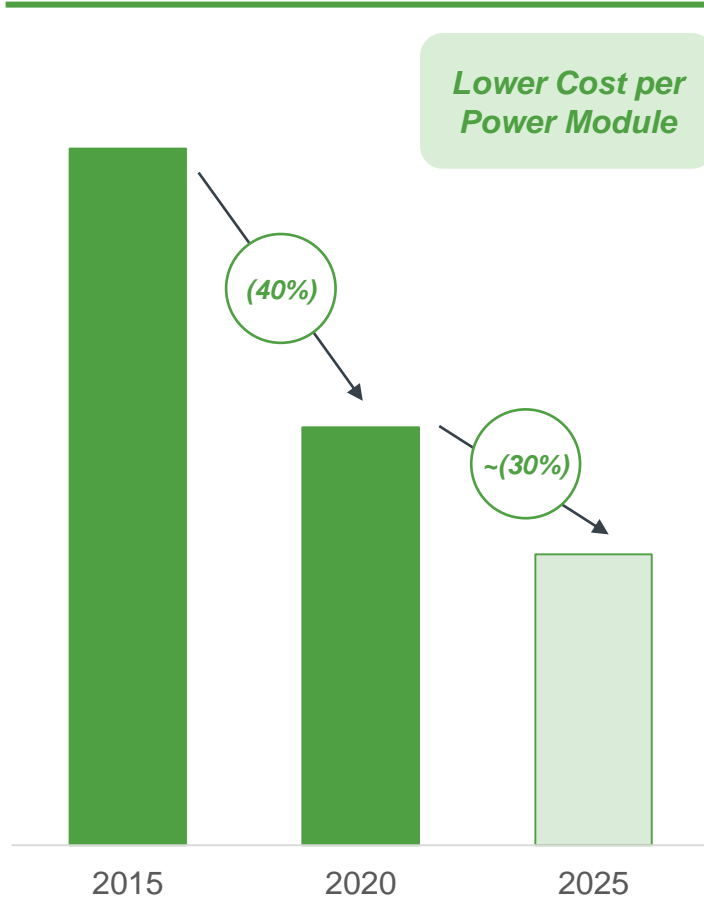




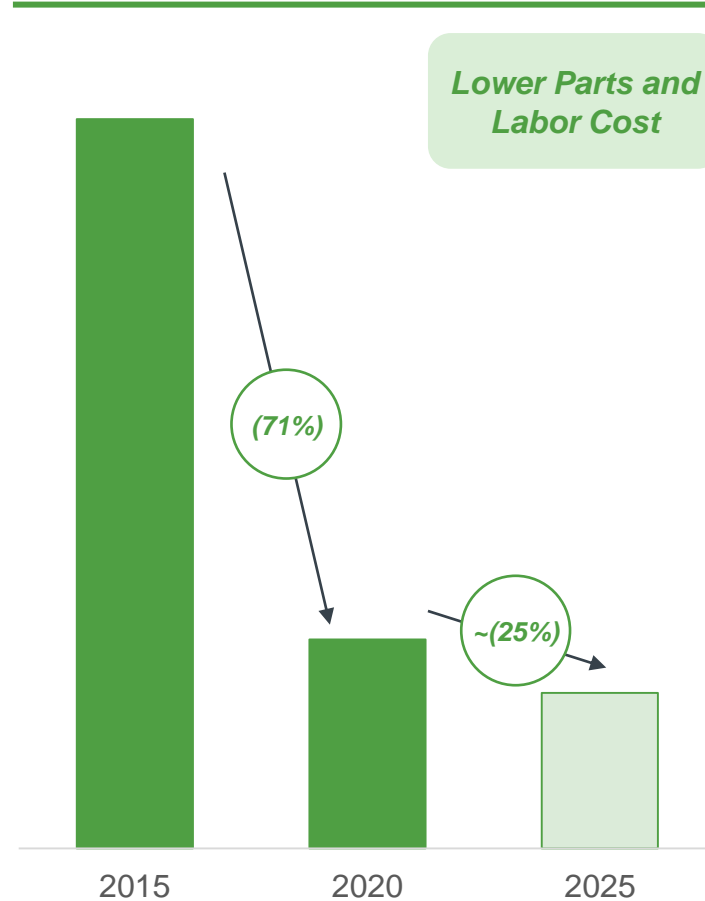
# 2

## REPLACEMENT COST

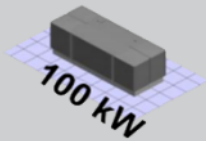
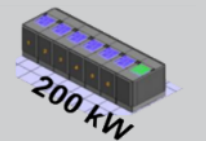
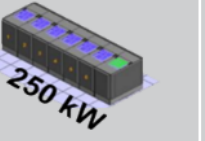
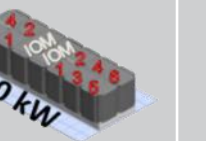
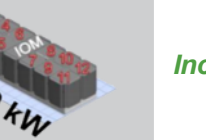
Power Module Cost (\$ / kW)



Parts & Labor Cost (\$ / kW)



# BLOOM POWER MODULE IMPROVEMENTS BY GENERATION

Generation	Bloom 1.0	Bloom 2.0	Bloom 2.5	Bloom 5.0	Bloom 7.5
Deployment	2008-11	2011-13	2013-16	2015-22	2021+
Module Power	25 kW	33 kW	42 kW	50 kW	75 kW
Footprint					
% of Fleet MW	<1%	4%	20%	75%	0%
Measured Avg. Life	1.8 Years	2.8 Years	4.9 Years	>5 Year (Proj.)	6 Year (Target)
Unit Cost / Output (Indexed)	100	66	57 - 35	39 - 14	<14

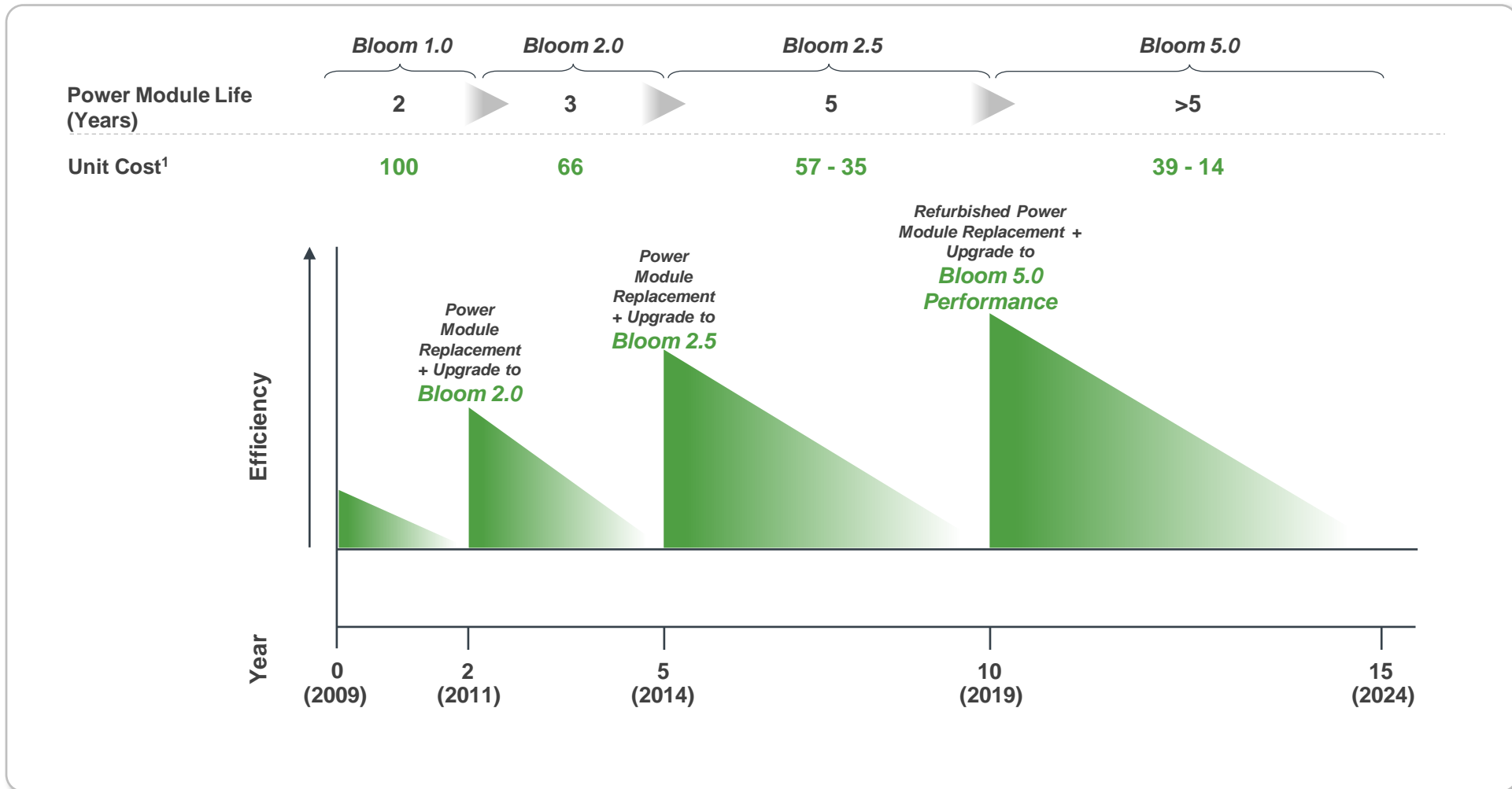
*Increased Power Module Output*

*Portfolio Generation Mix Improving*

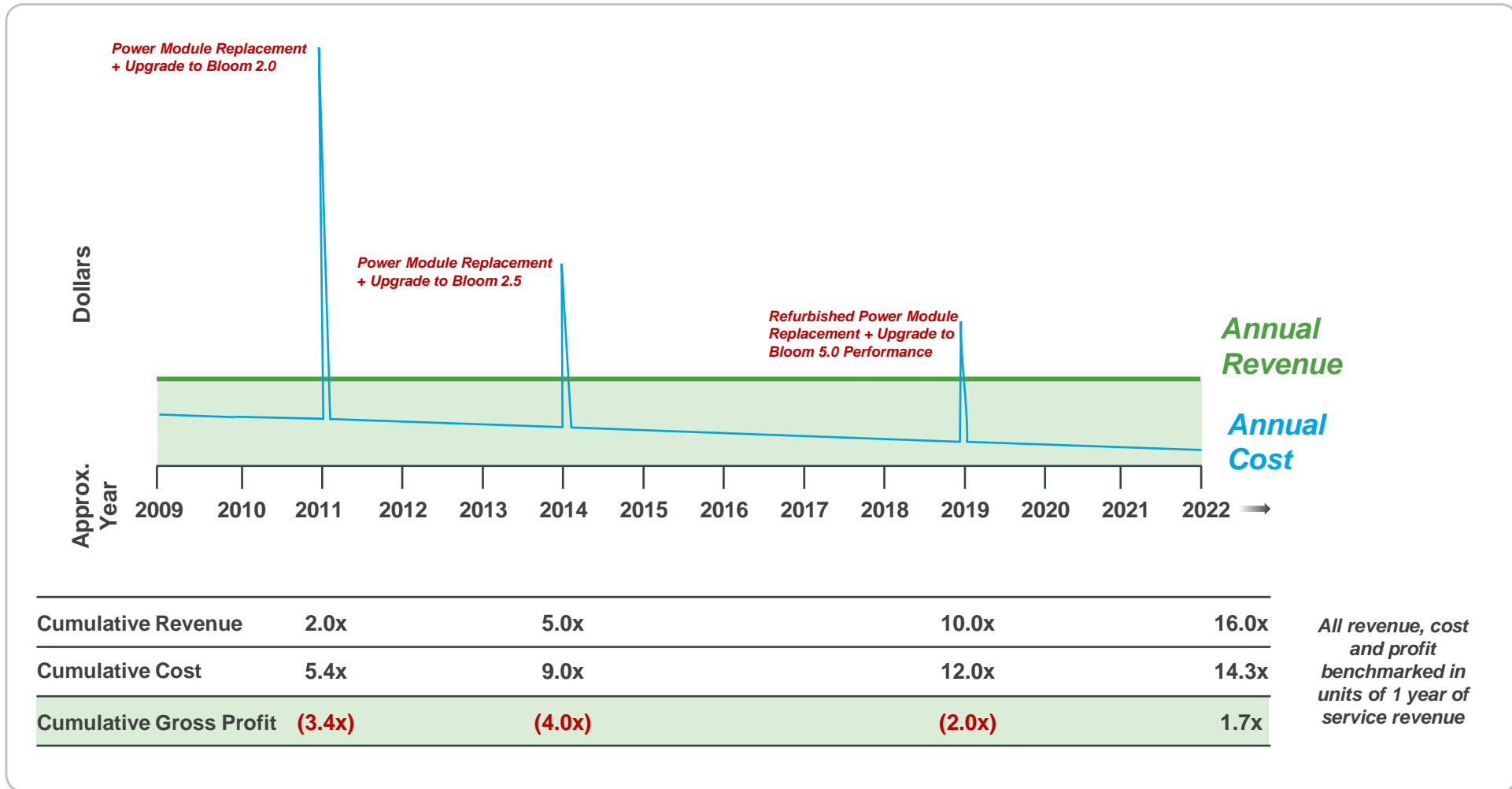
*Increased Power Module Life*

*Decreasing Costs per Power Generated*

# HOW IT WORKS IN PRACTICE: ILLUSTRATIVE PRODUCT LIFECYCLE



# HOW IT WORKS IN PRACTICE: ILLUSTRATIVE HISTORICAL VIEW



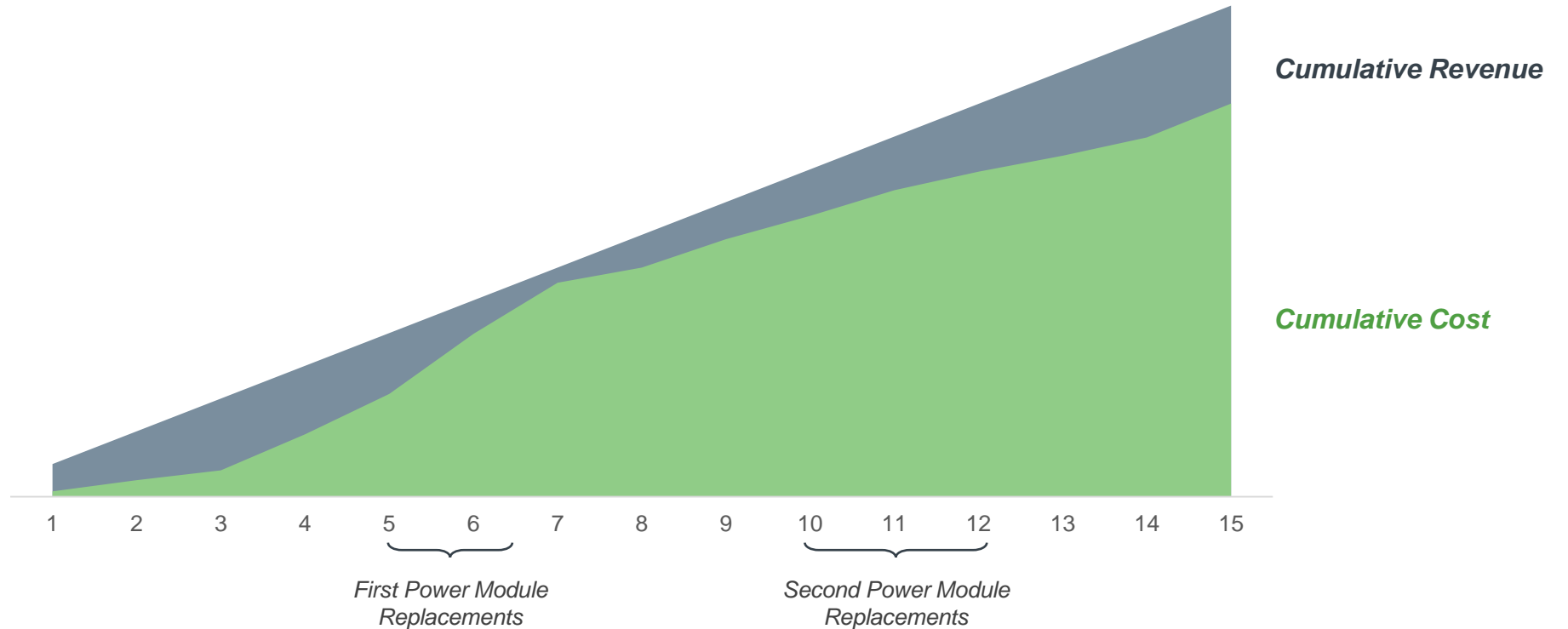
Cumulative Revenue	2.0x	5.0x	10.0x	16.0x
Cumulative Cost	5.4x	9.0x	12.0x	14.3x
Cumulative Gross Profit	(3.4x)	(4.0x)	(2.0x)	1.7x

*All revenue, cost and profit benchmarked in units of 1 year of service revenue*

# HOW IT WORKS IN PRACTICE: ILLUSTRATIVE CURRENT CONTRACT<sup>1</sup>

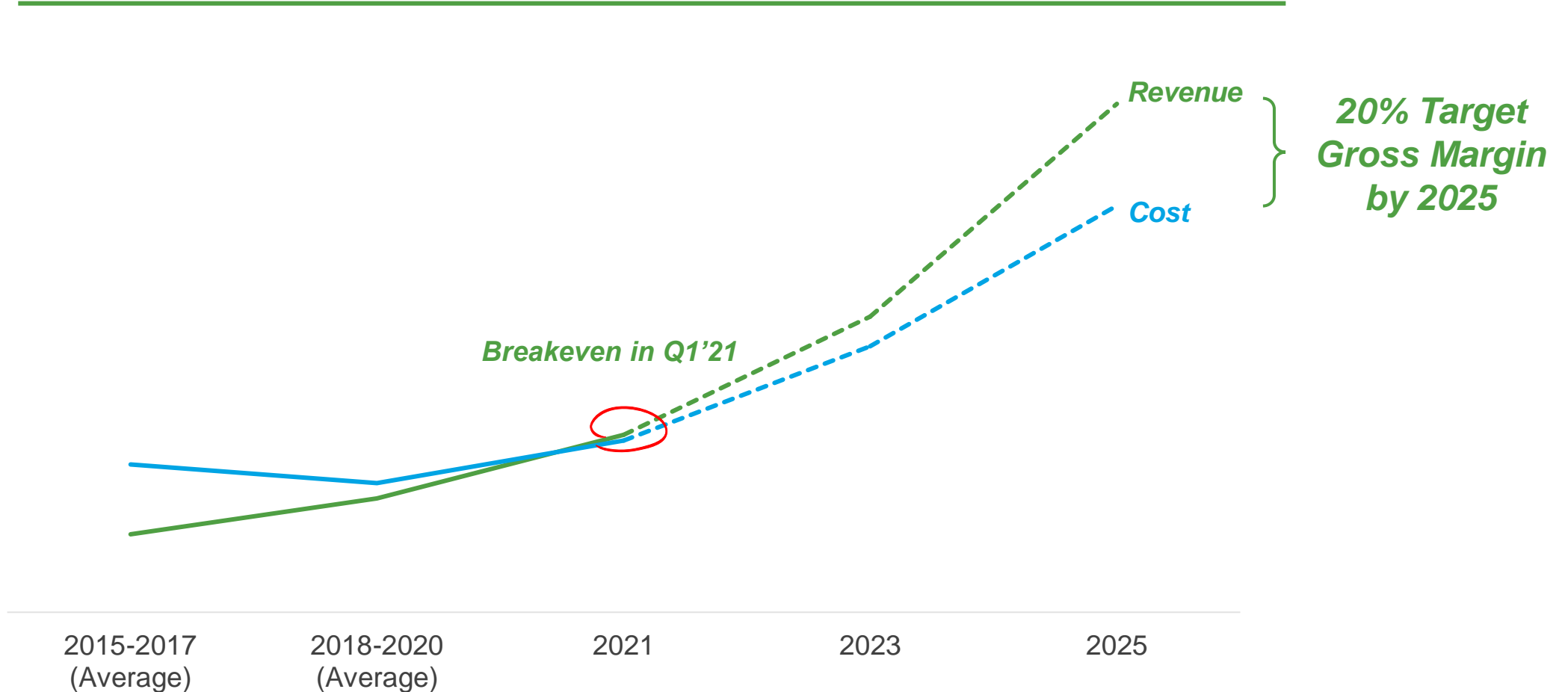
## Service Contract Cumulative Economics (\$M)

*Consistently profitable services contract*



# COMBINED P&L IMPACT OF CONTRACTS

Combined Economics of Services Contracts (\$M)



# KEY TAKEAWAYS

**Service Represents Attractive Recurring Revenue Stream with 100% Product Attach Rate**

**Yearly Profitability Expected in 2021**

**Scalability and Cost-out to Drive to 20% Target Service Gross Margin by 2025**



# Bloomenergy®

THANK YOU – Q&A

FEBRUARY 2021