

The Future of Home Energy Management



Your energy · Your choice · Always on



Enphase was founded in 2006 with five key elements to our value proposition: deliver products that are **smart**, **simple**, **reliable**, **productive**, and **safe**. Our value proposition rings as true today as when the company was founded.

Solar and storage technologies have the potential to enable energy independence for the homeowner through self-consumption. We estimate that the worldwide solar residential market will be more than 13GW in 2019, with a 10% compound annual growth rate (CAGR) from 2016 through 2022. Our served available market is approximately 40% of this market today. The residential storage market is also picking up a lot of steam and is expected to be around 1.5GWh in 2019 with a 34% CAGR from 2016 through 2022. These volume increases, coupled with the residential segment catering to customers paying retail rates, make our served markets very attractive.



## Solar and semiconductor technology expertise

We distinguish ourselves from other solar inverter companies with our systems-based and high technology approach. One of our core competencies is product innovation through software and semiconductors. Our intellectual property portfolio now includes more than 300 issued patents worldwide. Enphase revolutionized the solar industry by pioneering a semiconductor-based microinverter that converts energy at the individual solar module level and, combined with our proprietary networking and software technologies, provides advanced energy monitoring and control. Our microinverters go through rigorous testing, enabling us to continually integrate new improvements in each microinverter generation. The end result is smaller, lighter and more cost-effective products that improve both the value for our customers and the financial return for Enphase.



<sup>&</sup>lt;sup>1</sup> Enphase Energy Estimates

<sup>&</sup>lt;sup>2</sup> Frost and Sullivan Report, 2016

## Management has deep semiconductor and solar expertise



**Badri Kothandaraman**President and CEO

- Former COO At Enphase, Exec VP At Cypress Semiconductor For Memory And IoT Products
- B.Tech From IIT Madras And Masters In Materials Science From U.C. Berkeley
- Attended The Stanford Executive Program And Holds 8 US Patents



**Eric Branderiz**Chief Financial Officer

- 20+ Years Of Semiconductor, Energy And Solar Industry Finance And Operations Experience
- Former Tesla VP, Corporate Controller, And Chief Accounting Officer
- Former SVP, And Chief Accounting Officer At Sunpower & Spansion
- CPA, Bachelor's Degree in Business Commerce With Accounting Concentration From Univ Of Alberta



Jeff McNeil Chief Operating Officer

- Seasoned Executive In Semiconductor And Disk Drive Industry With 35 Years Experience
- SVP Operations At Cypress, Transformed Supply Chain Management
- Led A Precedent Setting FCC Certification For At-a-distance Wireless Power At Energous
- BS Chemical Eng. From San Jose State University



David Ranhoff
Chief Commercial Officer

- Seasoned Executive In Solar And Semiconductor Manufacturing
- Key Leadership Roles In Solar At GCL- Poly Solar, SunEdison And Solaicx
- Former CEO Of Credence Systems, A Semiconductor Equipment Manufacturer
- BSEE From Northeastern University And Attended The Stanford Executive Program



Raghu Belur Chief Products Officer

- Co-founder Of Enphase
- Developed High-speed Optical Communication Technology For Cerent (Acquired By Cisco)
- Master's Degree In EE From Texas A&M And MBA From Berkeley's Haas School Of Business



Martin Fornage Chief Technology Officer

- Co-founder Of Enphase And Developed The World's First Microinverter System
- 20 Years Designing Power Supplies, Fiber Optics, Wireline And RF Communications
- "Ingénieur Diplômé D'état" Degree From ENSEA In France
- Holds 77 US Patents





## Solid financial foundation

Enphase has undergone a major strategic transformation moving from "growth at any cost" to "profitable growth." To that end, in June 2017 we announced our 30-20-10 target financial base model. At the end of Q2'19, we did a lot better than 30-20-10, and exited the quarter with approximately 34-17-17, which means 34% gross margin, 17% operating expense and 17% operating income, all as a percentage of revenue on a non-GAAP basis.<sup>3</sup>

A financially stable Enphase is better for customers, partners, suppliers, and investors. Our focus on operational excellence has been important for building a solid financial foundation. We strengthened our balance sheet and exited Q2'19 with a total cash balance of \$206.0 million, which included net proceeds of approximately \$115.5 million associated with the issuance of convertible senior notes due 2024 and repurchase and exchange of certain convertible notes due 2023. In addition, we generated \$14.8 million in cash flow from operations and \$12.3 million in adjusted free cash flow in Q2'19. These financials represented a significant accomplishment and reaffirmed customer confidence.



# Customer experience through quality and service

We have shipped more than 21 million microinverters since inception, providing us with invaluable experience to identify potential product failure mechanisms and the ability to make improvements in future product generations. Quality is the bedrock of the Enphase product design, and we consistently set the bar high for quality and reliability. We improve the quality from one product generation to the next, and our systems have very high uptimes with no single point of failure. Our solution is based on a connected network of products that allow us to diagnose and problem solve remotely, reducing the end cost for both our customers and Enphase.



An important area of focus for us is ease of doing business - how customers perceive us. Quality and customer service together constitute customer experience and are the cornerstones of our strategy. Our customers are homeowners, installers and AC module partners. During the past several quarters, we have made many improvements in some of our customer call center metrics and online support. We announced in August 2019 that over 5,300 homeowners have now joined our Enphase Upgrade Program for early adopters of our legacy microinverters. This program represents our commitment to quality and customer service.

The key metric we use to measure customer experience is the Net Promoter Score, or NPS. This metric is calculated based on feedback from customer surveys on how likely customers or partners will recommend Enphase to a friend or colleague. Our NPS in North America was



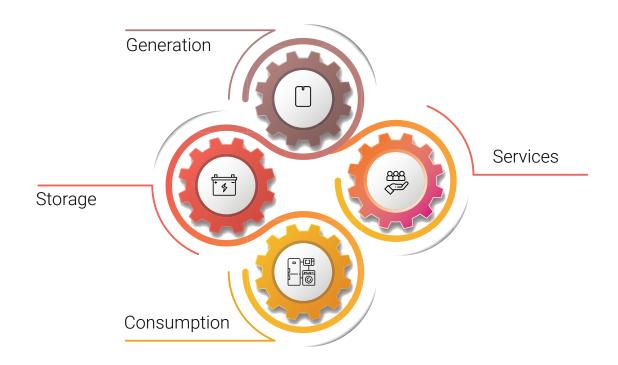
approximately 53% in Q2'19, compared to approximately 50% in Q1'19. Our target is to achieve a worldwide NPS of 60% or higher in Q4'19.



## Global reach

The Enphase presence extends globally, with our efforts focused in North America, Latin America, EMEA, and APAC. We have 455 employees worldwide as of June 30, 2019. Each global office has its own local sales teams, field application engineers and well-trained installer and partner networks. In addition, our state-of-the-art R&D facilities in California and New Zealand ensure product reliability with rigorous testing for products installed around the world. We also have an R&D and Operations center in India to take advantage of the great talent available there.

Our contract manufacturing model provides us with strategic manufacturing capabilities and flexibility, including expanding our manufacturing agreement to include Mexico as part of our plan to mitigate the Section 301 tariffs. Starting in late Q2'19, we began shipping our  $IQ^{\text{TM}}$  7 microinverters produced in Mexico to the Americas markets. This additional line in Mexico will help Enphase to not only mitigate tariffs, but also better serve our customers by cutting down cycle times and streamlining inventory, at similar manufacturing cost as China.



# Long-term growth strategy

Over the past few years, we have transitioned from a solar microinverter systems company to an energy management systems company. We think about this transition in terms of four gears or components – **energy generation**, **energy storage**, **energy consumption**, and **services**.







#### **Energy Generation**

The first gear, energy generation, is the core part of our business today. The latest products in this gear consist of our  $IQ^{\text{TM}}$  7 family of microinverters and AC Modules (ACMs), which are a combination of Enphase microinverters and photovoltaic (PV) modules. Approximately 98% of our microinverter shipments in Q2'19 were from the IQ 7 family, up from 94% in Q1'19.

We released our latest product in the IQ 7 family called IQ 7A, a high-power microinverter targeted for modules up to 450W DC. The pairing of high-efficiency solar modules with the IQ 7A family of microinverters is a powerful combination that creates value for homeowners. We are on track for general availability of IQ 7A microinverters for 72-cell modules in North America later this year.

We will continue to create value with ACMs that reduce logistics cost, while speeding up installation time. Installers have reported that these integrated systems help provide installation time savings up to 20%, logistics savings up to 10% and simpler inspection procedures when compared to a non-ACM solution. Our leading module manufacturer partners in developing Enphase Energized™ ACMs include SunPower, Panasonic, Solaria, and LONGi. Enphase Energized ACMs from our module partners have been adopted by more than 500 installers in the U.S. as of the end of Q2'19.





## **Energy Storage**

Our second gear is energy storage, and we expect it to play a major role in our near-term revenue growth. We plan to release the Ensemble™ storage solution in Q4′19, focused on residential storage in North America. Storage is enabled by the Encharge™ battery which is a modular 3.3 kWh solution. The 3.3kWh modularity allows for ease of installation, flexibility and scalability, while helping to streamline our supply chain. The Encharge battery will offer capacities of 3.3 and 10 kilowatt hours.

In the long-term, we aim to transform access to energy and create new markets, particularly in remote communities, with our next-generation IQ™ 8 product based on our Ensemble "always on" Solar and Storage technology. Ensemble presents a transformative opportunity for Enphase to increase our revenue potential per home from approximately \$2,000 to \$10,000.











### **Energy Consumption**

Our third gear, energy consumption, will provide customers the ability to measure, report and manage their consumption. We currently ship products that provide both measurement and reporting through our Enphase IQ Combiner™ products and Enphase Enlighten™ cloud-based energy monitoring and management platform, at an aggregated level. We expect to release new products over time, with advanced hardware and software capabilities to manage consumption in a fine-grained manner, both at a breaker level and an appliance level.

#### Services

The fourth and final gear is services. Our existing installed base of more than approximately 940,000 systems worldwide represents many potential opportunities, including product upgrades for both solar and storage, in addition to software services. We have learned a lot from the success of our legacy product upgrade program by engaging directly with homeowners. We plan to build on this learning and introduce Ensemble storage upgrades directly to our homeowner installed base in conjunction with both our distributor and qualified installer network. There are also several services such as APIs, warranty management, system monitoring, and advanced Enlighten features which have the potential to generate new revenue streams, including recurring subscriptions.



# Building a solid foundation

Enphase Energy is a global energy management systems solutions company with a mission to deliver technology solutions that make clean energy affordable, reliable and accessible to all. We consistently set the bar high for delivering quality and reliable products, and are laser-focused on providing a superior customer experience through quality and ease of doing business. With a management team consisting of Silicon Valley industry veterans with solid energy management, solar technology and semiconductor industry experience, we are committed to operational excellence through improved business processes, thereby optimizing Enphase's cost of doing business.



#### Use of Forward-Looking Statements

This presentation contains forward-looking statements made pursuant to the Safe Harbor provisions of the Private Securities Litigation Reform Act of 1995, including but not limited to statements concerning financial performance and potential revenues; our business strategies, including anticipated trends, growth, and developments in markets in which we operate and the anticipated market adoption of our products; the capabilities and performance of our technology and products, including product flexibility and scalability and monitoring, measuring, and management of energy consumption; reduced cost of doing business for our partners, including decreased installation, logistics, inventory, and cycle times; our performance in operations, including product quality, cost management, and customer service are based upon current expectations that involve risks and uncertainties. Any statements that are not of historical fact, may be forward-looking statements. Words used such as "anticipates," "believes," "continues," "designed," "estimates," "expects," "goal," "intends," "likely," "may," "ongoing," "plans," "projects," "pursuing," "seeks," "should," "will," "would" and similar expressions are intended to identify forward-looking statements, although not all forward-looking statements contain these words. All forward-looking statements are based on our current assumptions, expectations and beliefs, and involve substantial risks and uncertainties that may cause results, performance or achievement to materially differ from those expressed or implied by these forward-looking statements. Therefore, you should not place undue reliance on our forward-looking statements. A detailed discussion of risk factors that affect our business is included in the filings are available on the Enphase website at http://investor.enphase.com/sec.cfm, or on the SEO website at www.sec.gov. All forward-looking statements in this presentation are based on information currently available to us, and we assume no obligation to update these forward-

#### Industry Information

Information regarding market and industry statistics in this presentation is based on information available to us that we believe is accurate. It is generally based on publications that are not produced for purposes of economic analysis.

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#### Non-GAAP Financial Metrics

The Company has presented certain non-GAAP financial measures in this presentation. Generally, a non-GAAP financial measure is a numerical measure of a company's performance, financial position, or cash flows that either excludes or includes amounts that are not normally excluded or included in the most directly comparable measure calculated and presented in accordance with generally accepted accounting principles in the United States of America, or GAAP.

- Reconciliation of each non-GAAP financial measure to the most directly comparable GAAP financial measure can be found in the Appendix to this presentation. Non-GAAP financial measures
  presented by the Company include non-GAAP gross margin, operating expenses, income (loss) from operations, net loss and adjusted free cash flow.
- These non-GAAP financial measures do not reflect a comprehensive system of accounting, differ from GAAP measures with the same captions and may differ from non-GAAP financial measures with the same or similar captions that are used by other companies. In addition, these non-GAAP measures have limitations in that they do not reflect all of the amounts associated with the Company's results of operations as determined in accordance with GAAP. As such, these non-GAAP measures should be considered as a supplement to, and not as a substitute for, or superior to, financial measures calculated in accordance with GAAP. The Company uses these non-GAAP financial measures to analyze its operating performance and future prospects, develop internal budgets and financial goals, and to facilitate period-to-period comparisons. Enphase believes that these non-GAAP financial measures reflect an additional way of viewing aspects of its operations that, when viewed with its GAAP results, provide a more complete understanding of factors and trends affecting its business.
- As presented in the "Reconciliation of Non-GAAP Financial Measures" table in the Appendix to this presentation, each of the non-GAAP financial measures excludes one or more of the following
  items for purposes of calculating non-GAAP financial measures to facilitate an evaluation of the Company's current operating performance and a comparison to its past operating performance.
  - Stock-based compensation expense. The Company excludes stock-based compensation expense from its non-GAAP measures primarily because they are non-cash in nature. Moreover, the impact of this expense is significantly affected by the Company's stock price at the time of an award over which management has limited to no control.
- Restructuring charges. The Company excludes restructuring charges due to the nature of the expenses being unplanned and arising outside the ordinary course of continuing operations.
   These costs primarily consist of fees paid for restructuring-related management consulting services, cash-based severance costs related to workforce reduction actions, asset write-downs of property and equipment and lease loss reserves, and other contract termination costs resulting from restructuring initiatives.
- Reserve for non-recurring legal matter. This item represents a charge taken for the potential settlement cost related to a dispute with a vendor. This item is excluded as it relates to a specific matter and is not reflective of the Company's ongoing financial performance.
- Acquisition related expenses and amortization. This item represents expenses incurred related to the Company's acquisition of SunPower's microinverter business, which are non-recurring in nature, and amortization of acquired intangible assets, which is a non-cash expense. Acquisition related expenses and amortization of acquired intangible assets are not reflective of the Company's ongoing financial performance.
- Non-recurring debt prepayment fees and non-cash interest. This item consists primarily of amortization of debt issuance costs and non-recurring debt settlement costs, because these expenses does not represent a cash outflow for the
- Company except in the period the financing was secured or when the financing was settled, and such amortization expense or settlement of debt costs is not reflective of the Company's ongoing financial performance.
- Adjusted free cash flow. This item represents cash flows from operating activities excluding payments for the acquisition reported in operating activities less purchases of property and equipment. The Company believes the adjusted free cash flow is the best measure of how much cash the business generates after accounting for capital expenditures.

# Enphase Financials - GAAP To Non-GAAP Reconciliation

\$ in millions (*)	Q1'16	Q2'16	Q3'16	Q4'16	FY16	Q1'17	Q2'17	Q3'17	Q4'17	FY17	Q1'18	Q2'18	Q3'18	Q4'18	FY18	Q1'19	Q2'19
Gross profit (GAAP)	\$ 11.8	\$ 14.1	\$ 15.9	\$ 16.2	\$ 58.0	\$ 7.0	\$ 13.5	\$ 16.5	\$ 19.0	\$ 56.0	\$ 18.3	\$ 22.7	\$ 25.3	\$ 28.2	\$ 94.4	\$ 33.4	\$ 45.3
Stock-based compensation	0.3	0.3	0.3	0.3	1.2	0.2	0.2	0.3	0.3	1.1	0.2	0.4	0.3	0.1	1.1	0.2	0.4
Gross profit (Non-GAAP)	\$ 12.1	\$ 14.4	\$ 16.2	\$ 16.5	\$ 59.2	\$ 7.3	\$ 13.8	\$ 16.8	\$ 19.3	\$ 57.1	\$ 18.5	\$ 23.1	\$ 25.6	\$ 28.3	\$ 95.5	\$ 33.6	\$ 45.7
Gross margin (GAAP)	18.3%	17.9%	17.9%	17.9%	18.0%	12.9%	18.1%	21.4%	23.8%	19.6%	26.2%	29.9%	32.4%	30.5%	29.9%	33.3%	33.8%
Stock-based compensation	0.5%	0.3%	0.3%	0.3%	0.4%	0.4%	0.3%	0.4%	0.4%	0.4%	0.3%	0.6%	0.4%	0.2%	0.3%	0.2%	0.3%
Gross margin (Non-GAAP)	18.8%	18.2%	18.2%	18.2%	18.4%	13.3%	18.4%	21.8%	24.2%	20.0%	26.5%	30.5%	32.8%	30.7%	30.2%	33.5%	34.1%
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Operating expenses (GAAP)	\$ 30.8	\$ 29.9	\$ 33.6	\$ 26.3	\$ 120.7	\$ 29.1	\$ 22.8	\$ 22.4	\$ 21.1	\$ 95.4	\$ 20.8	\$ 23.3	\$ 25.6	\$ 23.2	\$ 92.8	\$ 26.2	\$ 27.9
Stock-based compensation	(2.7)	(2.4)	(2.2)	(1.8)	(9.1)	(1.7)	(1.4)	(1.4)	(1.2)	(5.7)	(1.4)	(3.9)	(3.7)	(1.4)	(10.4)	(3.0)	(4.2)
Restructuring and asset impairment charges	-	-	(2.7)	(1.1)	(3.8)	(7.2)	(3.6)	(4.1)	(2.0)	(15.9)	-	-	(2.6)	(1.5)	(4.1)	(0.4)	(0.6)
Reserve for non-recurring legal matter	-	-	-	-	-	-	-	-	-	-	(1.8)	-	-	-	(1.8)	-	-
Acquisition related expenses and amortization	(0.0)	(0.0)	(0.0)	(0.0)	(0.2)	-	-	-	-	-	-	(0.4)	(0.7)	(0.5)	(1.6)	(0.5)	(0.5)
Operating expenses (Non-GAAP)	\$ 28.1	\$ 27.5	\$ 28.6	\$ 23.4	\$ 107.6	\$ 20.2	\$ 17.8	\$ 16.9	\$ 18.0	\$ 72.8	\$ 17.7	\$ 19.0	\$ 18.6	\$ 19.7	\$ 75.0	\$ 22.3	\$ 22.5
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Income (loss) from operations (GAAP)	\$ (19.1)	, ,		\$ (10.1)	,	\$ (22.1)		, ,,	\$ (2.1)	\$ (39.4)		, ,,	\$ (0.4)		\$ 1.6		\$ 17.4
Stock-based compensation	3.0	2.7	2.5	2.1	10.3	1.9	1.6	1.7	1.4	6.7	1.6	4.3	4.1	1.5	11.4	3.2	4.6
Restructuring and asset impairment charges	-	-	2.7	1.1	3.8	7.2	3.6	4.1	2.0	16.9	1.0	-	2.6	1.5	4.1	0.4	0.6
Reserve for non-recurring legal matter	0.0	0.0	0.0	0.0	-	-	-	-	-	-	1.8	0.4	- 0.7	0.5	1.8 1.6	-	-
Acquisition related expenses and amortization					0.2	ć (12.0\	ć (4.0\	ć (0.1)	- ć 12	\$ (15.7)	\$ 0.9		\$ 7.0			0.5	\$ 23.2
Income (loss) from operations (Non-GAAP)	\$ (16.0)	\$ (13.0)	\$ (12.4)	\$ (6.9)	\$ (48.4)	\$ (12.9)	\$ (4.0)	\$ (0.1)	\$ 1.3	\$ (15.7)	\$ 0.9	\$ 4.1	\$ 7.0	\$ 8.6	\$ 20.5	\$ 11.3	\$ 23.2
Cash flows from operating activities	\$ (15.2)	\$ 7.3	\$ (20.6)	\$ (4.4)	\$ (33.0)	\$ (24.5)	\$ 0.2	\$ (2.2)	\$ (1.9)	\$ (28.4)	\$ 3.4	\$ 4.1	\$ 6.8	\$ 1.9	\$ 16.1	\$ 17.1	\$ 14.8
Payments for acquisition reported in cash flows	, (,	•			,	, ,,		, ,,								•	
from operating activities	-	-	-	-	-	-	-	-	-	-	-	-	6.0	4.0	10.0	-	-
Purchases of property and equipment	(3.3)	(4.2)	(2.1)	(2.6)	(12.2)	(3.5)	(0.0)	(0.1)	(0.5)	(4.1)	(1.0)	(0.4)	(0.9)	(1.8)	(4.2)	(0.7)	(2.5)
Adjusted free cash flow	\$ (18.6)	\$ 3.1	\$ (22.7)	\$ (6.9)	\$ (45.1)	\$ (28.0)	\$ 0.1	\$ (2.3)	\$ (2.4)	\$ (32.6)	\$ 2.3	\$ 3.6	\$ 11.9	\$ 4.1	\$ 22.0	\$ 16.4	\$ 12.3
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