PROSPECTUS

7,500,000 Shares

ENPHASE

Common Stock

This prospectus relates to the disposition from time to time of up to 7,500,000 shares of our common stock, which are held by the selling stockholder named in this prospectus. We issued the common stock to the selling stockholder pursuant to an Asset Purchase Agreement, dated June 12, 2018.

We are not selling any common stock under this prospectus, and we will not receive any of the proceeds from the sale of shares by the selling stockholder.

The selling stockholder identified in this prospectus, or its permitted transferees or other successors-in-interest that may be identified in a supplement to this prospectus or, if required, a post-effective amendment to the registration statement of which this prospectus is a part, may offer the shares from time to time through public or private transactions at fixed prices, at prevailing market prices, at varying prices determined at the time of sale, or at privately negotiated prices. We provide more information about how the selling stockholder may sell its shares of common stock in the section entitled "Plan of Distribution" beginning on page 9 of this prospectus. We have agreed to pay all costs, expenses and fees relating to registering the resale of the shares of our common stock referenced in this prospectus. We will not be paying any underwriting discounts or commissions in connection with any offering of common stock under this prospectus.

Our common stock is listed on the Nasdaq Global Market under the symbol "ENPH." On April 8, 2019, the last reported sale price of our common stock on the Nasdaq Global Market was \$10.24.

Investing in our common stock involves a high degree of risk. You should review carefully the risks and uncertainties included herein under the heading "Risk Factors" on page 3 of this prospectus.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or determined if this prospectus is truthful or complete. Any representation to the contrary is a criminal offense.

The date of this prospectus is April 9, 2019.

TABLE OF CONTENTS

	Page
ABOUT THIS PROSPECTUS	1
PROSPECTUS SUMMARY	2
RISK FACTORS	3
SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS	4
USE OF PROCEEDS	6
SELLING STOCKHOLDER	7
PLAN OF DISTRIBUTION	9
LEGAL MATTERS	11
EXPERTS	11
WHERE YOU CAN FIND MORE INFORMATION	11
INCORPORATION OF CERTAIN INFORMATION BY REFERENCE	12

ABOUT THIS PROSPECTUS

This prospectus is part of a registration statement on Form S-3 that we filed with the Securities and Exchange Commission, or SEC, using the "shelf" registration process. Under this process, the selling stockholder may from time to time, in one or more offerings, sell the common stock described in this prospectus.

You should rely only on the information contained in or incorporated by reference into this prospectus (as supplemented and amended). We have not authorized anyone to provide you with different information. This document may only be used where it is legal to sell these securities. The information contained in this prospectus (and in any supplement or amendment to this prospectus) is accurate only as of the date on the front of the document, and any information we have incorporated by reference is accurate only as of the date of the document incorporated by reference, regardless of the time of delivery of this prospectus or any sale of our common stock. Our business, financial condition, results of operations and prospects may have changed since those dates.

We urge you to read carefully this prospectus (as supplemented and amended), together with the information incorporated herein by reference as described under the heading "Incorporation of Certain Information by Reference" before deciding whether to invest in any of the common stock being offered.

This prospectus incorporates by reference market data, industry statistics and other data that have been obtained from, or compiled from, information made available by third parties. We have not independently verified such data. This prospectus and the information incorporated herein by reference include trademarks, service marks and trade names owned by us or other companies. All trademarks, service marks and trade names included or incorporated by reference into this prospectus are the property of their respective owners.

PROSPECTUS SUMMARY

This summary highlights selected information appearing elsewhere or incorporated by reference into this prospectus and may not contain all of the information that is important to you. You should read this prospectus carefully, including the risks and uncertainties included herein under the heading "Risk Factors" beginning on page 3 of this prospectus and incorporated by reference from our most recent annual report on Form 10-K, as the same may be amended, supplemented or superseded by the risks and uncertainties described under similar headings in other documents that are filed by us after the date hereof and incorporated by reference into this prospectus, before making an investment decision.

Company Overview

We are a global energy technology company, delivering smart, easy-to-use solutions that connect solar generation, storage and communications management on one intelligent platform. We revolutionized solar with our microinverter technology and produce the world's only truly integrated solar-plus-storage solution. We have shipped more than 19 million microinverters, representing over 4 gigawatts of solar photovoltaic ("PV") generating capacity, and more than 855,000 Enphase residential and commercial systems have been deployed in over 125 countries.

Corporate Information

We were incorporated as PVI Solutions, Inc. in March 2006 in the State of Delaware and changed our name to Enphase Energy, Inc. in July 2007. Our principal corporate offices are located at 47281 Bayside Parkway, Fremont, CA, 94538, and our telephone number is (707) 774-7000. Our website is located at www.enphase.com. Information found on, or accessible through, our website is not a part of, and is not incorporated into, this prospectus, and you should not consider it part of this prospectus. Our website address is included in this document as an inactive textual reference only.

The Offering

The selling stockholder named in this prospectus may offer and sell up to 7,500,000 shares of our common stock. Our common stock is currently listed on the Nasdaq Global Market under the symbol "ENPH." Shares of common stock that may be offered under this prospectus will be fully paid and non-assessable. We will not receive any of the proceeds of sales by the selling stockholder of any of the common stock covered by this prospectus. Throughout this prospectus, when we refer to the shares of our common stock being registered on behalf of the selling stockholder for offer and sale, we are referring to the shares issued to the selling stockholder pursuant to the Asset Purchase Agreement we entered into with the selling stockholder on June 12, 2018, referred to as the Asset Purchase Agreement, and when we refer to the selling stockholder in this prospectus, we are referring to the selling stockholder, its permitted transferees or other successors-in-interest that may be identified in a supplement to this prospectus or, if required, a post-effective amendment to the registration statement of which this prospectus is a part.

Risk Factors

Investing in our common stock involves a high degree of risk. See "Risk Factors" on page 3 below.

RISK FACTORS

An investment in our common stock involves a high degree of risk. Before deciding whether to invest in our common stock, you should consider carefully the risks and uncertainties discussed under the heading "Risk Factors" contained in our most recent annual report on Form 10-K for the period ended December 31, 2018, filed with the SEC on March 15, 2019, and incorporated by reference in this prospectus, as the same may be amended, supplemented or superseded by the risks and uncertainties described under similar headings in the other documents that are filed by us after the date hereof and incorporated by reference into this prospectus. Additional risks not currently known to us or that we currently believe are immaterial may also significantly impair our business operations. Please also read carefully the section below entitled "Special Note Regarding Forward-Looking Statements."

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus, any prospectus supplement and the documents incorporated by reference herein or any such prospectus supplement include forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, or the Securities Act, and Section 21E of the Securities Exchange Act of 1934, as amended, or the Exchange Act, and the Private Securities Litigation Reform Act of 1995. Also, documents that we incorporate by reference into this prospectus that we subsequently file with the SEC will include forward-looking statements. Forward-looking statements are those that predict or describe future events or trends and that do not relate solely to historical matters. You can generally identify forward-looking statements as statements containing the words "may," "will," "could," "should," "expect," "anticipate," "intend," "estimate," "believe," "project," "plan," "assume" or other similar expressions, or negatives of those expressions, although not all forward-looking statements contain these identifying words. All statements contained in or incorporated by reference into this prospectus regarding future operating or financial performance, business strategies, technology developments, financing and investment plans, competitive position, industry and regulatory environment, potential growth opportunities, the effects of competition, expense levels, liquidity sources, timing of new product releases, and with respect to our completed transactions under the Asset Purchase Agreement with SunPower Corporation, or SunPower, involve known and unknown risks, uncertainties and other factors which may cause our actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by the forward-looking statements. Some of the factors that we believe could affect our results include:

- our ability to improve our liquidity and to achieve profitability;
- our ability to reduce product costs and operating expenses;
- the future demand for solar energy solutions;
- the reduction, elimination or expiration of government subsidies and economic incentives for on-grid solar electricity applications;
- the impact of tariffs and other government actions on the solar industry, our products and international trade;
- our ability to achieve and realize the anticipated benefits of the Master Supply Agreement with SunPower that became effective upon the closing of the transactions under the Asset Purchase Agreement;
- · our ability to achieve broader market acceptance of our microinverter systems;
- our reliance on sole-source and limited-source suppliers for key components and products;
- · changes in the retail price of electricity derived from the utility grid or alternative energy sources;
- our ability to raise additional capital on favorable terms to execute on our current or future business opportunities;
- · changes in international trade policy or the imposition of new laws or regulations that materially harm our business;
- the threat of global economic, capital markets and credit disruptions that pose risks for our business;
- our ability to retain key personnel and effectively manage our workforce during our planned expansion into new markets;
- the ability of potential owners of solar PV systems to secure financing on acceptable terms;
- change in seasonal trends, natural disasters, construction cycles, terrorist or cyber-attacks, or other catastrophic events;
- our ability to develop new and enhanced products in response to customer demands and rapid market and technological changes in the solar industry;
- our ability to compete effectively with existing and new competitors; and
- the success of competing solar solutions that are or become available.

Table of Contents

While we believe that we have a reasonable basis for each forward-looking statement, we caution you that these statements are based on a combination of facts and factors currently known by us and our projections of the future, about which we cannot be certain. We discuss many of these risks, uncertainties and other factors in greater detail under the heading "Risk Factors" contained in our annual report on Form 10-K for the fiscal period ended December 31, 2018, filed with the SEC on March 15, 2019, and incorporated by reference in this prospectus, as the same may be amended, supplemented or superseded by the risks and uncertainties described under similar headings in the other documents that we file after the date hereof and are incorporated by reference into this prospectus. Given these risks, uncertainties and other factors, you should not place undue reliance on these forward-looking statements. Also, these forward-looking statements represent our estimates and assumptions only as of the date such forward-looking statements are made. You should carefully read this prospectus, together with the information incorporated herein by reference as described under the heading "Incorporation of Certain Information by Reference," completely and with the understanding that our actual future results may be materially different from what we expect. We can give no assurances that any of the events anticipated by the forward-looking statements will occur or, if any of them do, what impact they will have on our business, results of operations and financial condition. We hereby qualify all of our forward-looking statements by these cautionary statements.

Except as required by law, we assume no obligation to update these forward-looking statements publicly, or to update the reasons actual results could differ materially from those anticipated in these forward-looking statements, even if new information becomes available in the future. We claim the protection of the safe harbor for forward-looking statements contained in the Private Securities Litigation Reform Act of 1995 for all forward-looking statements.

USE OF PROCEEDS

We are not selling any securities under this prospectus, and we will not receive any proceeds from the sale or other disposition of the shares covered hereby. We have agreed to pay all costs, expenses and fees relating to the registration of the resale of the shares of our common stock referenced in this prospectus. The selling stockholder will pay any brokerage commissions and/or similar charges incurred in connection with the sale or other disposition by them of the shares covered hereby.

SELLING STOCKHOLDER

Private Placement Shares

On June 12, 2018, we entered into the Asset Purchase Agreement with SunPower pursuant to which we issued and sold to SunPower, in a private placement, 7,500,000 shares of common stock, or the Private Placement Shares, as partial consideration for the transactions under the Asset Purchase Agreement. Pursuant to a Stockholders Agreement entered into upon the closing under the Asset Purchase Agreement, referred to as the Stockholders Agreement, we agreed to file the registration statement of which this prospectus is a part to cover the resale of the shares issued to the selling stockholder, and to keep such registration statement effective until the date on which all of the 7,500,000 shares registered for resale under this registration statement have been sold or can be sold publicly without restriction or limitation under Rule 144 under the Securities Act or such earlier date as may be provided for in the Stockholders Agreement.

In accordance with the Stockholders Agreement, we are registering the resale of the Private Placement Shares issued pursuant to the Asset Purchase Agreement to permit the selling stockholder identified below, or its permitted transferees or other successors-in-interest that may be identified in a supplement to this prospectus or, if required, a post-effective amendment to the registration statement of which this prospectus is a part, to resell or otherwise dispose of the shares in the manner contemplated under "Plan of Distribution" in this prospectus (as supplemented and amended). This prospectus covers the sale or other disposition by the selling stockholder of up to the total number of shares of common stock issued to the selling stockholder pursuant to the Asset Purchase Agreement. Throughout this prospectus, when we refer to the shares of our common stock being registered on behalf of the selling stockholder, we are referring to the Private Placement Shares, and when we refer to the selling stockholder in this prospectus, we are referring to SunPower, its permitted transferees or other successors-in-interest that may be identified in a supplement to this prospectus or, if required, a post-effective amendment to the registration statement of which this prospectus is a part.

The selling stockholder may sell some, all or none of its shares. We do not know how long the selling stockholder will hold the shares before selling them, and the Stockholders Agreement, dated August 9, 2018, between us and SunPower includes further restrictions on the timing and volume of shares that are subject to sale or other disposition of any of the shares. The shares covered hereby may be offered from time to time by the selling stockholder.

The following table sets forth the name of the selling stockholder, the number and percentage of our common stock beneficially owned by the selling stockholder as of March 22, 2019, the number of shares that may be offered under this prospectus, and the number and percentage of our common stock beneficially owned by the selling stockholder assuming all of the shares covered hereby are sold. Beneficial ownership is determined in accordance with the rules of the SEC and includes voting or investment power with respect to our common stock. Generally, a person "beneficially owns" shares of our common stock if the person has or shares with others the right to vote those shares or to dispose of them, or if the person has the right to acquire voting or disposition rights within 60 days.

All information contained in the table below and the footnotes thereto is based upon information provided to us by the selling stockholder. The information in the table below and the footnotes thereto regarding shares of common stock to be beneficially owned after the offering assumes the sale of all shares being offered by the selling stockholder under this prospectus. The percentage of shares owned prior to and after the offering is based on 110,316,799 shares of common stock outstanding as of March 22, 2019. Unless otherwise indicated in the footnotes to this table, we believe that the selling stockholder named in this table has sole voting and investment power with respect to the shares of common stock indicated as beneficially owned.

	Prior to Offering			After Offering	
	Number of	Percentage		Number of	Percentage
	Shares	of Shares	Number of	Shares	of Shares
	Beneficially	Beneficially	Shares	Beneficially	Beneficially
Name and Address	Owned	Owned	Offered(2)	Owned	Owned
SunPower Corporation(1)	7,500,000	6.8%	7,500,000	0	0%

⁽¹⁾ SunPower has sole voting power with respect to all of the shares and sole dispositive power with respect to all of the shares. The corporate address for SunPower is 77 Rio Robles, San Jose, California 95134.

⁽²⁾ The number of shares offered hereby consists solely of the Private Placement Shares issued pursuant to the Asset Purchase Agreement.

Relationships with the Selling Stockholder

In connection with the transactions under the Asset Purchase Agreement, we and SunPower entered into a Master Supply Agreement under which SunPower will exclusively procure from us module level power electronics and related equipment for use in the U.S. residential market for a period of five years. Further, the Stockholders Agreement provides SunPower the right to appoint one person to our board of directors; however, as of April 9, 2019, SunPower has not designated a person to be appointed to our Board of Directors.

PLAN OF DISTRIBUTION

We are registering the resale of the shares of common stock issued to the selling stockholder pursuant to the Asset Purchase Agreement to permit the resale of these shares of common stock by the selling stockholder from time to time after the date of this prospectus. We will not receive any of the proceeds from the sale by the selling stockholder of the shares of common stock. We will bear all fees and expenses incident to our obligation to register the shares of common stock.

The selling stockholder may, from time to time, sell any or all of its shares of common stock covered hereby on the Nasdaq Global Market or any other stock exchange, market or trading facility on which the shares are traded or in private transactions. These sales may be at fixed prices, at prevailing market prices at the time of the sale, at varying prices determined at the time of sale, or privately negotiated prices. A selling stockholder may use any one or more of the following methods when selling shares:

- ordinary brokerage transactions and transactions in which the broker-dealer solicits purchasers;
- block trades in which the broker-dealer will attempt to sell the shares as agent but may position and resell a portion of the block as principal to
 facilitate the transaction;
- · purchases by a broker-dealer as principal and resale by the broker-dealer for its account;
- · an exchange distribution in accordance with the rules of the applicable exchange;
- privately negotiated transactions;
- in transactions through broker-dealers that agree with the selling stockholder to sell a specified number of such shares at a stipulated price per share;
- · short sales effected after the effective date of the registration statement of which this prospectus is a part;
- through the writing or settlement of options or other hedging transactions, whether through an options exchange or otherwise;
- · sales pursuant to Rule 144;
- · a combination of any such methods of sale; or
- · any other method permitted pursuant to applicable law.

The selling stockholder may, from time to time, pledge or grant a security interest in some of all of the shares of common stock owned by it and, if it defaults in the performance of its secured obligations, the pledgees or secured parties may offer and sell the shares of common stock, from time to time, under this prospectus, or under an amendment to this prospectus under Rule 424(b)(3) or other applicable provision of the Securities Act amending the list of selling stockholders to include the pledgee, transferee or other successors in interest as selling stockholders under this prospectus. The selling stockholder may also transfer the shares of common stock in other circumstances, in which case the transferees, pledgees or other successors in interest will be the selling beneficial owners for purposes of this prospectus.

Broker-dealers engaged by the selling stockholder may arrange for other brokers-dealers to participate in sales. Broker-dealers may receive commissions or discounts from the selling stockholder (or, if any broker-dealer acts as agent for the purchaser of shares, from the purchaser) in amounts to be negotiated, but, except as set forth in a supplement to this prospectus, in the case of an agency transaction not in excess of a customary brokerage commission in compliance with FINRA Rule 2440; and in the case of a principal transaction a markup or markdown in compliance with FINRA IM-2440-1.

The selling stockholder and any broker-dealers or agents that are involved in selling the shares of common stock may be deemed to be "underwriters" within the meaning of the Securities Act in connection with such sales. In such event, any commissions received by such selling stockholder, broker-dealers or agents and any profit on the resale of the shares purchased by them may be deemed to be underwriting commissions or discounts under the Securities Act. If the selling stockholder is deemed to be an "underwriter" within the meaning of Section 2(11) of the Securities Act, it will be subject to the prospectus delivery requirements of the Securities Act and may be subject to certain statutory liabilities of, including but not limited to, Sections 11, 12 and 17 of the Securities Act and Rule 10b-5 under the Exchange Act. The selling stockholder has informed us that it is not a registered broker-dealer or an affiliate of a registered broker-dealer. In no event shall any broker-dealer receive fees, commissions and markups which, in the aggregate, would exceed 8%.



Table of Contents

We are required to pay certain fees and expenses incurred by us incident to the registration of the resale of the shares. We have agreed to indemnify the selling stockholder against certain losses, claims, damages and liabilities, including liabilities under the Securities Act, and the selling stockholder may be entitled to contribution. We may be indemnified by the selling stockholder against certain losses, claims, damages and liabilities under the Securities Act that may arise from any written information furnished to us by the selling stockholder specifically for use in this prospectus, or we may be entitled to contribution.

The selling stockholder will be subject to the prospectus delivery requirements of the Securities Act including Rule 172 thereunder unless an exemption therefrom is available.

We agreed to cause the registration statement of which this prospectus is a part to remain effective until the date that all shares of common stock issued to the selling stockholder have been sold or can be sold publicly without restriction or limitation under Rule 144 (including, without limitation, the requirement to be in compliance with Rule 144(c)(1)), or such earlier date as may be provided for in the Stockholders Agreement. The shares of common stock will be sold only through registered or licensed brokers or dealers if required under applicable state securities laws. In addition, in certain states, the shares of common stock covered hereby may not be sold unless they have been registered or qualified for sale in the applicable state or an exemption from the registration or qualification requirement is available and is complied with.

Under applicable rules and regulations under the Exchange Act, any person engaged in the distribution of the shares of common stock may not simultaneously engage in market making activities with respect to the shares of common stock for the applicable restricted period, as defined in Regulation M, prior to the commencement of the distribution. In addition, the selling stockholder will be subject to applicable provisions of the Exchange Act and the rules and regulations thereunder, including Regulation M, which may limit the timing of purchases and sales of shares of common stock by the selling stockholder or any other person. We will make copies of this prospectus available to the selling stockholder and have informed it of the need to deliver a copy of this prospectus at or prior to the time of the sale (including by compliance with Rule 172 under the Securities Act).

There can be no assurance that any selling stockholder will sell any or all of the shares of common stock we registered on behalf of the selling stockholder pursuant to the registration statement of which this prospectus forms a part.

Once sold under the registration statement of which this prospectus forms a part, the shares of common stock will be freely tradable in the hands of persons other than our affiliates.

LEGAL MATTERS

The validity of the common stock being offered hereby has been passed upon for us by Arnold & Porter Kaye Scholer LLP, New York, New York.

EXPERTS

The consolidated financial statements incorporated in this prospectus by reference from the company's Annual Report on Form 10-K, have been audited by Deloitte & Touche LLP, an independent registered public accounting firm, as stated in their report, which is incorporated herein by reference. Such consolidated financial statements have been so incorporated in reliance upon the report of such firm given upon their authority as experts in accounting and auditing.

WHERE YOU CAN FIND MORE INFORMATION

We are a reporting company and file annual, quarterly and current reports, proxy statements and other information with the SEC. We have filed with the SEC a registration statement on Form S-3 under the Securities Act with respect to the resale of the common stock the selling stockholder is offering under this prospectus. This prospectus does not contain all of the information set forth in the registration statement and the exhibits to the registration statement. For further information with respect to us and the common stock offered by the selling stockholder under this prospectus, we refer you to the registration statement and the exhibits filed as a part of the registration statement. You may read and copy the registration statement, as well as our reports, proxy statements and other information, at the SEC's Public Reference Room at 100 F Street, N.E., Washington, D.C. 20549. Please call the SEC at 1-800-SEC-0330 for more information about the operation of the public reference room. The SEC also maintains an Internet site that contains reports, proxy and information statements and other information regarding issuers that file electronically with the SEC, including Enphase. The SEC's Internet site can be found at www.sec.gov. We maintain a website at www.enphase.com. Information found on, or accessible through, our website is not a part of, and is not incorporated into, this prospectus, and you should not consider it part of this prospectus.

INCORPORATION OF CERTAIN INFORMATION BY REFERENCE

The SEC allows us to incorporate by reference the information we file with it, which means that we can disclose important information to you by referring you to another document that we have filed separately with the SEC. You should read the information incorporated by reference because it is an important part of this prospectus. Information in this prospectus supersedes information incorporated by reference that we filed with the SEC prior to the date of this prospectus, while information that we file later with the SEC will automatically update and supersede the information in this prospectus. We incorporate by reference into this prospectus and the registration statement of which this prospectus is a part the information or documents listed below that we have filed with the SEC (Commission File No. 001-35480):

- our Annual Report on Form 10-K for the fiscal year ended December 31, 2018, filed with the SEC on March 15, 2019;
- the information specifically incorporated by reference in our Annual Report on Form 10-K for the fiscal year ended December 31, 2018 and our Definitive Proxy Statement on Schedule 14A, as amended, filed with the SEC on April 4, 2019;
- our Current Report on Form 8-K filed with the SEC on February 6, 2019; and
- the description of our common stock in our registration statement on Form 8-A filed with the SEC on March 28, 2012, including any further amendments thereto or reports filed for the purposes of updating this description.

We also incorporate by reference any future filings (other than current reports furnished under Item 2.02 or Item 7.01 of Form 8-K and exhibits filed on such form that are related to such items unless such Form 8-K expressly provides to the contrary) made with the SEC pursuant to Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act, including those made after the date of the initial filing of the registration statement of which this prospectus is a part and prior to effectiveness of such registration statement, until we file a post-effective amendment that indicates the termination of the offering of the common stock made by this prospectus and will become a part of this prospectus from the date that such documents are filed with the SEC. Information in such future filings updates and supplements the information provided in this prospectus. Any statements in any such future filings will automatically be deemed to modify and supersede any information in any document we previously filed with the SEC that is incorporated or deemed to be incorporated herein by reference to the extent that statements in the later filed document modify or replace such earlier statements.

We will furnish without charge to each person, including any beneficial owner, to whom a prospectus is delivered, upon written or oral request, a copy of any or all of the documents incorporated by reference into this prospectus but not delivered with the prospectus, including exhibits that are specifically incorporated by reference into such documents.

You can request a copy of these filings, at no cost, by writing or telephoning us at the following address or telephone number:

Enphase Energy, Inc. 47281 Bayside Parkway Fremont, CA 94538 (707) 774-7000 Attn: Legal Department