



CEO Letter to Shareholders 2021





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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 future financial performance and guidance, including revenues, gross margin, operating results, expenses and costs; our business strategies, including our operations and anticipated trends and developments in markets in which we operate and in the markets in which we plan to expand; our expectations as to the impacts and evolving effects of the ongoing COVID-19 pandemic and current geopolitical issues; the anticipated market adoption of Enphase's new products and technologies; the capabilities and performance of our technology and products, including future products and services, and the reduction of soft costs and commissioning times for installers; the ability to optimize and customize products, load disaggregation, monitoring, and management, and reduction in installation, logistics and supply chain times; our performance in operations, including management and customer service. These statements 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 we make with the Securities and Exchange Commission (SEC) from time to time, including our most recent reports on Form 10-K and Form 10-Q, particularly under the heading "Risk Factors." Copies of these filings are available on the Enphase website at <http://investor.enphase.com/sec.cfm>, or on the SEC 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-looking statements in light of new information or future events.

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.

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 profit, gross margin, operating expenses, income from operations, net income, net income per share and 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" page, 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.
- Tariff refunds. This item represents approved tariff refunds, and interest income earned on those refunds, by the U.S. Customs and Border Protection that qualify for the tariff exclusion on Chinese imported microinverter products that fit the dimensions and weight limits within a Section 301 Tariff exclusion under U.S. note 20(ss)(40) to subchapter III of chapter 99 of the Harmonized Tariff Schedule of the United States. Approved refunds relate to tariffs previously paid from September 24, 2018 to March 31, 2020 and are excluded from the non-GAAP measures as the refunds are non-recurring in nature for tariff costs incurred in the past and are not reflective of the Company's ongoing financial performance.
- Acquisition related expenses and amortization. This item represents expenses incurred related to the Company's business acquisition, 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-cash interest expense. This item consists primarily of amortization of debt issuance costs, accretion of debt discount and non-recurring debt settlement costs, because these expenses do 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.
- Loss on partial settlement of convertible notes. This item is reflected in other income (expense), net and represents (i) the difference between the carrying value and the fair value of the settled convertible notes and (ii) the inducement loss for the difference between the value of the shares issued to settle the convertible notes and the value of the shares that would have been issued under the original conversion terms with respect to the repurchased Notes due 2025, which is non-cash in nature and is not reflective of the Company's ongoing financial performance.
- Change in fair value of derivatives. This item is reflected in other income (expense), net and represents changes in fair value of the conversion option in the convertible notes due 2025, as well as the convertible note hedge and warrant transactions, which is non-cash in nature and is not reflective of the Company's ongoing financial performance.
- Non-GAAP income tax adjustment. This item represents the amount adjusted to the Company's GAAP tax provision or benefit to present the non-GAAP tax amount based on cash tax expense and reserves.
- Free cash flow. This item represents net cash flows from operating activities plus deemed repayment of convertible notes attributable to accreted debt discount reported in operating activities less purchases of property and equipment.

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Dear fellow shareholders,



Badri Kothandaraman
President and CEO

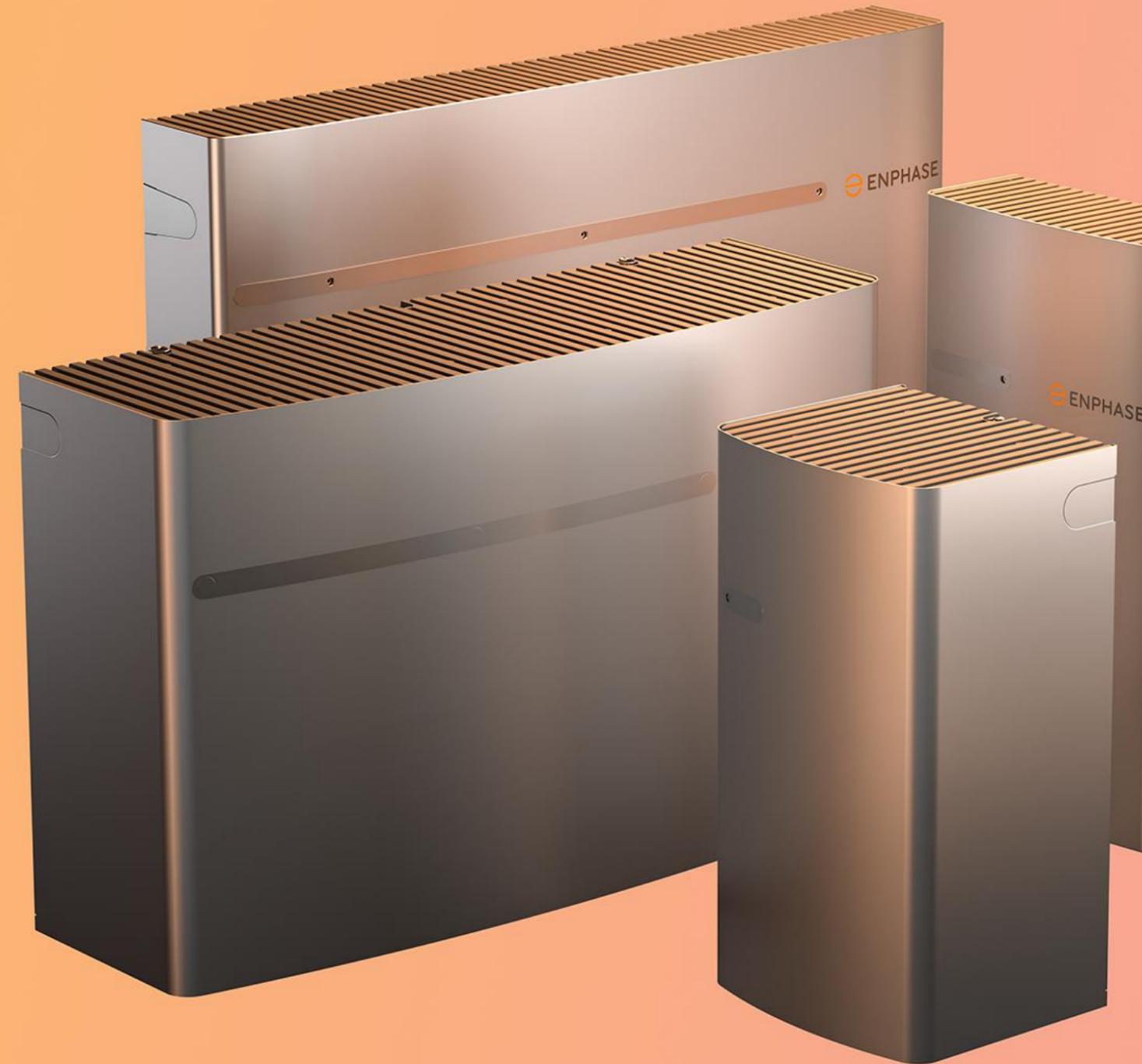
2021 was undoubtedly strange. We wanted life to return to normal after experiencing the COVID-19 pandemic in 2020, but it didn't really turn out that way. It was not exactly a dull year though. The demand for our products was robust, and we had our hands full with global challenges, as supply chain shortages impacted almost every business. Enphase and the solar industry were enormously resilient and adjusted well to the changes in conditions. In general, we are pleased with our performance in 2021.

We resolved key supply issues that prevented us from ramping and went from strength to strength on solar microinverters. We started to ramp on battery storage systems in the U.S. throughout the year. The realization that our systems are now in the path of power with batteries caused us to step up our field support to installers as well as institute 24x7 customer service. We released IQ8™ Microinverters which can form a microgrid during a power outage using only sunlight, providing backup power even without a battery. We made four acquisitions during the year, three of them focused on software and services for our installers. Finally, we were pleased to publish our inaugural [ESG report](#) in 2021 and remain committed to advancing a sustainable future for all.

“We have never lost sight of the three cornerstones that have guided us since the beginning: innovation, quality, and customer experience.”

I am very proud of all our employees around the world who continue to work tirelessly to deliver innovative products and services to our customers. We have never lost sight of the three cornerstones that have guided us since the beginning: innovation, quality, and customer experience. And our [culture playbook](#) is a reminder of how we work together and achieve results.

Our strategy is to build best-in-class home energy systems and deliver them to homeowners through our installer and distribution partners, enabled by an installer digital platform. In this spirit and backdrop, this letter highlights our 2021 accomplishments, reinforces our strategy, and discusses our priorities for 2022.



IQ™ Batteries 3/10 (T) with 3.3 kWh and 10 kWh capacities are shown, with the “T” being thinner in depth

Our 2021 performance



“We achieved record revenue growth across all regions in 2021, with more than 78% growth year-over-year.”

For the full year 2021, our revenue increased 78% sequentially to \$1.4 billion, compared to \$774.4 million in 2020. We shipped 10.4 million microinverters in 2021, compared to 6.8 million microinverters in 2020. Our non-GAAP gross margin in 2021 was 40.7%,¹ compared to 40.1%¹ in 2020, primarily due to disciplined pricing and cost management, despite inflation. We exited 2021 with \$1.0 billion in cash, cash equivalents, and marketable securities. In March 2021, we successfully completed the issuance of green convertible notes that resulted in net proceeds of approximately \$1.2 billion. The terms of this capital raise were some of the most favorable to an issuer in history. We were bestowed with an ESG Award and Structured Equity [Award](#) from IFR for this green bond.

We are pleased to report that 2021 was a record year for non-GAAP profitability and cash flow from operations. We generated \$352.0 million in cash flow from operations in 2021, compared to \$216.3 million in 2020. We repurchased approximately 3.2 million shares in 2021 for a total of \$500 million dollars with an average price of \$155 per share. This represents approximately 2.4 percent of our outstanding shares. Our view on share buyback is simple and we take a page out of Warren Buffet’s book. We take care of the needs of our business first, followed by ensuring we have enough cash for future acquisitions and strategic investments. Once these are done, we engage in opportunistic share repurchases if we believe our share price is less than a conservatively calculated intrinsic value.

We achieved record revenue growth across all regions

We achieved record revenue growth across all regions in 2021, with more than 78% growth year-over-year. Our U.S. and international revenue mix for 2021 was 80% and 20%, respectively. Revenue increased 74% year-over-year in the U.S. as we experienced strong demand for both microinverters and batteries. Our growth in the U.S. was broad-based. While we work with installers of all shapes and sizes, it is no secret that we celebrate the small- and medium-sized installers. We think our products and services add maximum value to them and we are committed to doing everything possible to simplify their business.

In Europe, our revenue more than doubled year-over-year. During 2021, we expanded into Italy with IQ™ Microinverters and introduced IQ™ Batteries in Germany and Belgium. Europe is leading the world in the move towards clean energy not only by adopting full home electrification with electric vehicles (EVs) and heat pumps, but also using self-consumption from solar and battery storage technologies to power the home. We are excited about our growth opportunities particularly in Germany and Netherlands, followed by France, Belgium, Poland, Spain, and Italy for our solar, storage, and EV charging solutions.

¹See Appendix for reconciliation to comparable GAAP measures

In the Asia Pacific region, our revenue increased 80% year-over-year and in 2022, we look to capitalize on the solar industry’s recovery from COVID-related restrictions, as well as recent regulatory changes that are favorable to our safer AC architecture.

Our revenue growth in Latin America increased 77% year-over-year as we had strong demand in Puerto Rico for our solar-plus-storage business. Puerto Rico is one of the top regions in the U.S. with the highest penetration of batteries due to frequent outages caused by natural disasters. We entered the Brazilian solar market in October of 2021 with the introduction of IQ7+™ microinverters for residential and small commercial installers across Brazil.

Our teams did a terrific job navigating the supply chain crisis

While the global supply chain came under stress in 2021, due to the resurgence in economic activity, we managed our suppliers well and qualified additional sources rapidly. Demand for our microinverter systems continued to be well ahead of supply. We were tight on semiconductor gate driver chips and application-specific integrated circuits (ASIC chips) for our microinverters in early 2021, but recovered quite well by qualifying more sources and working closely with our foundry partners. For batteries, we experienced global logistics challenges with a sharp increase in ocean container costs coupled with port constraints causing long lead times of 14-16 weeks. There were constant disruptions and surprises in the supply chain throughout the year and the teams did an admirable job of plowing through.

“While the global supply chain came under stress due to the resurgence in economic activity, we managed our suppliers well and qualified additional sources rapidly.”

We built up a total capacity of approximately 5 million microinverters per quarter as we exited the year. We added a second fully automated line earlier in 2021 at our contract manufacturer in India, bringing our quarterly capacity to about 1.5 million microinverters. We added a fully automated line in Mexico in the fourth quarter of 2021, bringing quarterly capacity to approximately 2.25 million microinverters in Mexico. We also recently announced a new manufacturing agreement in Romania with Flex® for microinverter manufacturing in Europe starting in the first quarter of 2023. We see rapid growth in Europe and would like to service customers better. We will then have four locations in total – China, Mexico, India, and Europe for the manufacturing of our microinverters.

On batteries, our two sources for Lithium Iron Phosphate (LFP) battery cell packs increased their total capacity to approximately 180 megawatt hours per quarter as we exited the year. Our existing cell pack suppliers can always add more capacity if required, and we are continuing discussions with additional cell pack suppliers. We are pleased that we have been right about LFP chemistry all along for residential storage. We are seeing more players adopting LFP batteries

due to their thermal stability and enhanced safety. Finally, we are always looking at opportunities to globalize our battery supply chain. Our cell pack suppliers are based in China and diversification will help us reduce supply chain uncertainty while driving down costs.



Our IQ Batteries have LFP chemistry and operate at low DC voltages around 65V

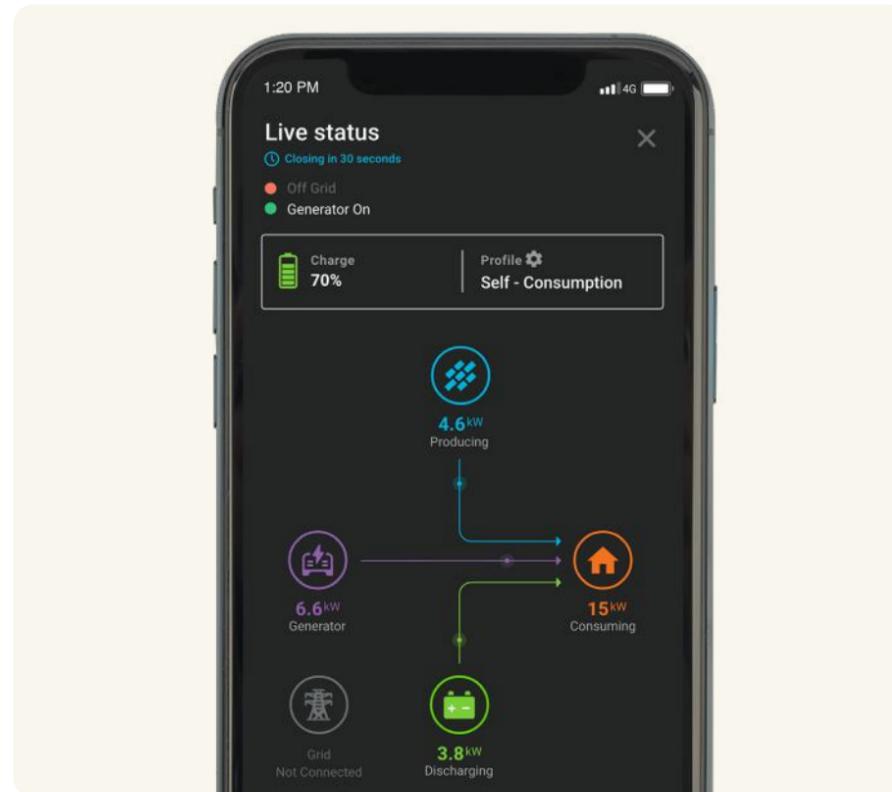
We shipped 251 megawatt hours of IQ Batteries during the year

We saw steady growth in our IQ Battery shipments every quarter of 2021. We optimized pricing for installers and continued to improve the installer experience by simplifying commissioning and reducing installation times. Our goal remains to reduce the commissioning time to under an hour, allowing installers to install and commission batteries in less than a day. For homeowners, it is important to provide them up-to-date information about the performance of their systems. To achieve this, we focused on providing text messaging and push notifications for critical events, allowing them to be “always informed” during both on-and off-grid situations. The Enphase® App provides homeowners unprecedented data and control of their systems.

We released new features for our batteries in 2021, including M-Series™ inverter compatibility, load control, and generator support. Our batteries are now compatible with legacy Enphase M215™ and M250™ microinverter-based solar systems. The expanded compatibility provides approximately 300,000 Enphase system owners with the possibility of achieving energy resilience through upgrade programs.

“We released new features for our batteries in 2021, including M-Series™ compatibility, load control, and generator support.”

Load control provides homeowners the ability to conserve their energy consumption by shedding non-essential loads during an outage and thereby extending the battery life. Our systems can integrate with most leading models of home standby AC generators, providing enhanced performance and a glitch-free transition for homeowners during power outages. Homeowners can monitor power real-time, remotely start and stop their generator, set quiet hours to prevent their generator from operating until their batteries fall below a designated state of charge, and control it all with the Enphase App.



Enphase systems can integrate with most home standby generators and provide a glitch-free transition during outages

“We have many new grid services engagements in the pipeline and look forward to working with more utilities and aggregators during the coming months.”

In addition to the new features, we are partnering with aggregators and utilities to enable grid services. This will enable the utilities to leverage home batteries instead of building polluting peaker plants. In doing so, homeowners get paid for sharing their batteries. During 2021, we announced our participation in ConnectedSolutions, an incentive program implemented by three utilities in Connecticut, Massachusetts, and Rhode Island to reduce electrical demand during high-use periods; Hawaiian Electric’s Battery Bonus grid services program that offers incentive for homeowners on the island of Oahu who install a new home battery; and Arizona Public Service’s residential battery grid services program that offers homeowners who install Enphase IQ Batteries the chance to participate and earn money through one-time upfront incentives. We recently announced that Vermont-based utility Green Mountain Power (GMP) will offer Enphase® Energy Systems to its customers in a cutting-edge battery lease grid services pilot program. We have many new grid services engagements in the pipeline and look forward to working with more utilities and aggregators.

Our Net Promoter Score was 69% exiting the year

In my weekly executive staff meetings, we begin with a review of our customer dashboard where we focus on ease of doing business. We look at worldwide call volumes, wait times, fleet issues, commissioning times, and upcoming fixes. The discussions are often animated and focused on why we aren’t moving faster to help our installers and homeowners. Problems can occur and our focus is on what we can learn from them and not have them repeated. For example, during Hurricane Ida in 2021 a handful of homeowners in New Orleans had completely drained their batteries down to zero charge and were out of power. The solar systems based on IQ7™ Microinverters could not start the batteries even with the sun present because those microinverters are not grid-forming. The utility grid was also out for several days. Our field service technicians teamed up with installers and showed up on-site in less than 24 hours. We had to use unconventional ways to power up the system such as getting a portable generator. Our unilateral focus was to get the homeowners’ systems up immediately and learn from that situation. We learnt that a 5% or 10% reserve charge in batteries will help black start the system the next morning when the sun comes up and our applications are now automatically set to retain such a reserve. Of course, IQ8 microinverters will not have that problem as it is grid-forming and can jump start the batteries when the sun comes up.

“We introduced 24/7 support in 2021 for installers and system owners across our phone, online chat, and email channels.”

In the same two hour weekly executive staff meetings, the next item on the agenda is quality. We look at our quarterly defect pareto for microinverters and batteries. We focus on getting to the root cause of issues, figure out interim corrective actions, and institute permanent corrective actions. We often prioritize fixing customer problems rather than working on the next shiny new product. I have often said that our target annual failure rate for microinverters is 0.05%. That is now a reality. We are now trying to replicate that on batteries. For microinverters, we have nearly seven generations of learning. For batteries, we are on our second generation and learning at a fast rate using similar principles. We are confident about the product’s reliability and have a 5-year limited warranty extension available in most areas for purchase on batteries to take the overall limited warranty to 15 years. Also, we strongly believe and demand our systems to be “always connected” to maximize factory to field learning and solve problems quickly.

The combination of quality and service constitute customer experience. Our worldwide Net Promoter Score (NPS) was 69% exiting the year; our goal was 70% entering the year. We worked hard on many initiatives such as fixing the root cause of problems, retraining our agents, matching orphaned sites to active installers for better servicing, and improving our tools, processes, and systems. We introduced 24/7 support in 2021 for installers and system owners across our phone, online chat, and email channels. We hired more than twenty

field sales technicians to help installers with their battery issues. Over the years, we have made steady improvements, including the Enphase University platform, online chat feature, and service tools for the activation and return processing of microinverters. We resumed in-person installer training in 2021, while continuing online certification. We hold weekly roundtables with installers where our executive team meets with six to eight installers at a time. The installers are encouraged to be frank, and the conversation is usually free flowing, focused on the improvements we can make to our solar and storage systems. These are the conversations we want as they help us improve.

We introduced the Enphase Community for direct engagement with installers and system owners in 2020. It has grown to be truly global with more than 170,000 members. With over 1,000 published articles and more than 8,000 answered questions, the Community helps customers and installers discover more about solar and batteries from users worldwide. In addition, it plays a vital role in customer engagement and helps our product teams learn first-hand what the customers expect from Enphase.

We started production shipments of IQ8™ Microinverters

In the fourth quarter of 2021, we started production shipments of IQ8 Microinverters to customers in North America. IQ8 Microinverters are the industry's first microgrid-forming, software-defined microinverters with split-phase power conversion capability to convert DC power to AC power efficiently. The brain of the semiconductor-based microinverter is our proprietary ASIC which enables the microinverter to operate in grid-tied or off-grid modes. This chip is built in advanced 55nm semiconductor technology with high-speed digital logic and has super-fast response times to changing loads and grid events, alleviating constraints on battery sizing for home energy systems.



The IQ8 family of microinverters can provide Sunlight Backup during an outage even without a battery

“Now, with IQ8, homeowners can realize the true promise of solar — to make and use their own power.”

“The increasing penetration of electric vehicles (EVs) has significant implications for home energy management.”

Many homeowners often assume their solar systems will function if the sun is shining, even during a power outage. This has unfortunately not been true until the introduction of IQ8. Now, with IQ8 microinverters, homeowners can realize the true promise of solar — to make and use their own power when the sun is shining. IQ8 solar microinverters can provide Sunlight Backup™ during an outage, even without a battery.

We added EV charging products to our portfolio, grew our installer network, and bolstered our installer digital platform through acquisitions

We acquired ClipperCreek at the end of December 2021, which offers Level 2 AC charging solutions for residential and commercial customers in the U.S. The increasing penetration of electric vehicles (EVs) has significant implications for home energy management. It is estimated that 80% of all EV charging will happen at home. The energy consumed by the home will significantly increase with an EV. This increase will drive more adoption of solar which will enable homeowners to save money and charge their vehicle in a green manner. The large EV battery could be used for home backup and helping the grid in the future. This acquisition plays extremely well to our strengths in energy management, ultimately helping the homeowner manage solar, storage and EV in addition to home loads.



ClipperCreek EV chargers are known for high quality and service

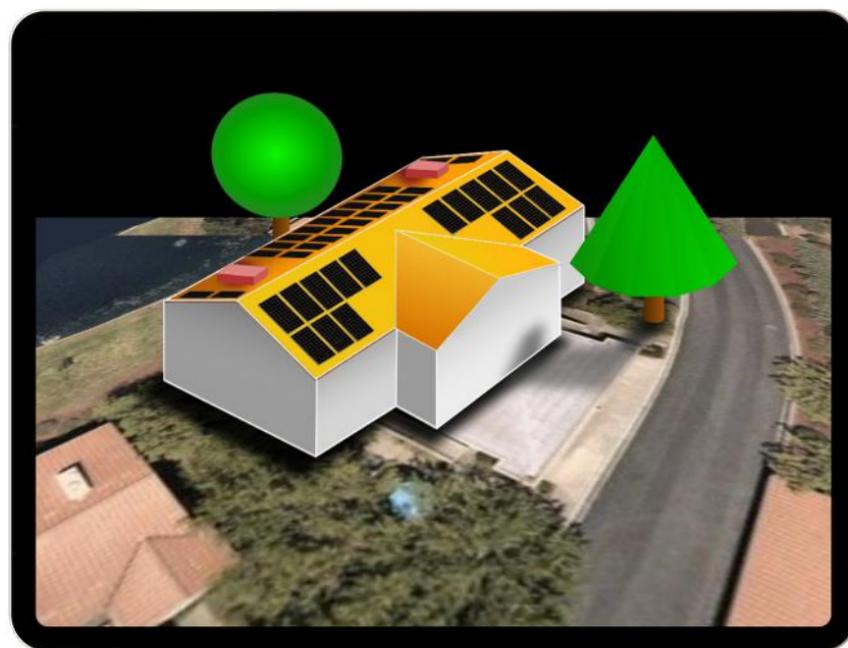
In 2021, we expanded our Enphase Installer Network (EIN) in the Netherlands, Belgium, France, Mexico, Puerto Rico, and India, after successful launches in

the U.S. and Australia in 2020. Our EIN encompasses a network of trusted solar installers that deliver exceptional homeowner experiences using Enphase products. It is designed to help Enphase installers grow their business with a range of innovative products, digital tools, and exclusive benefits. It has been a highly successful initiative as we continue to add trusted installers who will act as our product evangelists and provide an exceptional experience to homeowners across the globe. By the end of 2021, we had onboarded more than 1,100 installers to our EIN worldwide through a highly selective process focused on installation quality and homeowner experience.

“By the end of 2021, we had onboarded more than 1,100 installers to our EIN worldwide through a highly selective process focused on installation quality and homeowner experience.”

We want to assist our installer network with lead management, design and proposal creation, permit plan sets, installation and commissioning, fleet monitoring, and maintaining solar and battery systems. By providing a comprehensive platform covering these services, we aim to simplify the sales and installation process, reducing soft costs and providing an exceptional experience to homeowners. Most of our acquisitions in 2021 were geared towards this strategy.

In January of 2021, we acquired Sofdesk Inc., which provides design and proposal software for installers. This business serves more than 900 installers today. Installers can use the software to model roofs, place solar panels, get access to loan partners, and create final proposals for homeowners. We are taking this software to the next level by incorporating AI and creating 3D models with algorithms to capture shading accurately. We are also incorporating battery storage into the proposals as attach rates in the U.S. rise steadily due to drivers like blackouts and energy independence.



The Solargraf Pro™ design and proposal software incorporates AI algorithms for 3D and shading

In March of 2021, we acquired the Solar Design Services business of DIN Engineering Services LLP, which provides proposal and permitting services. This business serves nearly 25% of the North American solar installer base. We are focused on automating the creation of permit plan sets to further expand the installer base and extend it to small and medium size installers.

In December of 2021, we acquired 365 Pronto, Inc., which offers a predictive software platform dedicated to simplifying the cleantech service landscape by matching cleantech asset owners to a local and on-demand workforce of service providers. 365 Pronto has hundreds of service providers nationwide who are qualified on its platform. We hope to offer this software to our installers to streamline their operations and maintenance (O&M).

In March of 2022, we acquired SolarLeadFactory LLC, which provides high-quality leads to solar installers in the U.S. We acquired the company with the objective of substantially increasing lead volumes and conversion rates to help drive down the customer acquisition costs for installers. We plan to expand the team, use machine learning to optimize lead management, and offer this service broadly to our installer network.

In summary, with the recent acquisitions we now have several tools in-house: lead generation, solar design and proposal software, permitting services, and O&M software. In addition, we already have robust and homegrown mobile apps for the commissioning and monitoring of solar and storage systems. We plan to integrate all these together seamlessly into one platform and offer them to our installer network.

“In summary, with the recent acquisitions we now have several tools in-house: lead generation, solar design and proposal software, permitting services, and O&M software.”

We beat our 35-15-20 baseline financial model

We introduced our 35-15-20 baseline financial model at our Investor Day in 2019. 35-15-20 stands for 35% gross margin, 15% operating expenses, and 20% operating income, all as a percentage of revenue on a non-GAAP basis. Another useful way to think about the baseline is that we won't launch a new product that is not capable of meeting a gross margin floor of 35%. Our actual numbers in 2021 came in at approximately 41-16-25, beating the baseline financial model in terms of operating income. Our 2021 GAAP net income was \$145.4 million, resulting in diluted earnings per share of \$1.02. Non-GAAP net income was \$340.3 million, resulting in diluted earnings per share of \$2.41. We think it is prudent to retain our 35-15-20 baseline financial model considering the uncertain global supply chain situation.

Below is a recap of our financial performance in 2021 as compared with 2020. Dollars are represented in thousands, except per share data and percentages:

GAAP				
	2021		2020	
Revenue	\$	1,382,049	\$	774,425
Gross Margin		40.1 %		44.7 %
Operating Expense		24.5 %		20.6 %
Operating Income	\$	215,832	\$	186,439
Net Income	\$	145,449	\$	133,995
Basic EPS	\$	1.09	\$	1.07
Diluted EPS	\$	1.02	\$	0.95
Cash and marketable securities	\$	1,016,651	\$	679,379
Cash Flows from Operating Activities	\$	352,028	\$	216,334

Non-GAAP				
	2021		2020	
Revenue	\$	1,382,049	\$	774,425
Gross Margin		40.7 %		40.1 %
Operating Expense		16.0 %		15.3 %
Operating Income	\$	341,054	\$	192,504
Net Income	\$	340,314	\$	188,526
Basic EPS	\$	2.54	\$	1.50
Diluted EPS	\$	2.41	\$	1.37
Cash and marketable securities	\$	1,016,651	\$	679,379
Free Cash Flows	\$	315,488	\$	198,908

We executed on most of the priorities I highlighted in my letter a year ago

“We ended the year with 2,260 employees, and I am very thankful to all of them for their contributions during the year.”

In conclusion, we had a good 2021. We grew our revenue significantly, stayed focused on delivering a good customer experience, increased our battery business, started shipping IQ8™ Microinverters, and made progress on the installer digital platform through acquisitions. The results on our new product execution were mixed. Two of our new products, the IQ8D™ Microinverter for the small commercial solar segment and the Portable Energy System for the consumer segment, were delayed and we now expect to introduce them in 2022. We will be using the learning from this experience for future product development. We ended the year with 2,260 employees, and I am very thankful to all of them for their contributions during the year.



The IQ8D™ microinverter works with two panels in series producing 640W AC output power

Our strategic focus



The Swift ASIC in IQ8™ can respond quickly to changing grid conditions, 1000x faster than IQ7™

“The brain of our microinverter is a homegrown high-speed digital ASIC which is responsible for power control and power line communication.”

Our strategy is simple. We focus on making best-in-class home energy systems that enable homeowners to make, use, save, and sell their own power. We are deeply committed to making these systems innovative, high-quality, and easy-to-use. Installers are our lifeblood, and we rely on them to sell our products to homeowners. We also rely on great distribution partners who have a wide reach and can service installers with inventory and working capital. We recognize the problems that installers face such as soft costs, disparate tools, and manual processes and are committed to building an end-to-end installer platform to help minimize them.

Raghu Belur and Martin Fornage founded Enphase in 2006 based on their deep-rooted belief that an AC-coupled distributed architecture always wins in the long run on both cost and reliability. To build products based on this architecture, we developed core competencies in semiconductor-based power conversion, software-defined Internet of things (IoT) systems, and an energy management platform. The brain of our microinverter is a homegrown high-speed digital ASIC which is responsible for power control and power line communication. We also have custom analog ASICs in the microinverter for more integration. The microinverters, batteries, system controller, and cloud software form a true IoT system. Our Ensemble™ technology manages energy flow between the various distributed energy resources (DERS), the utility grid and home loads, with the aim of delivering the most reliable solution for homeowners at the lowest energy cost.

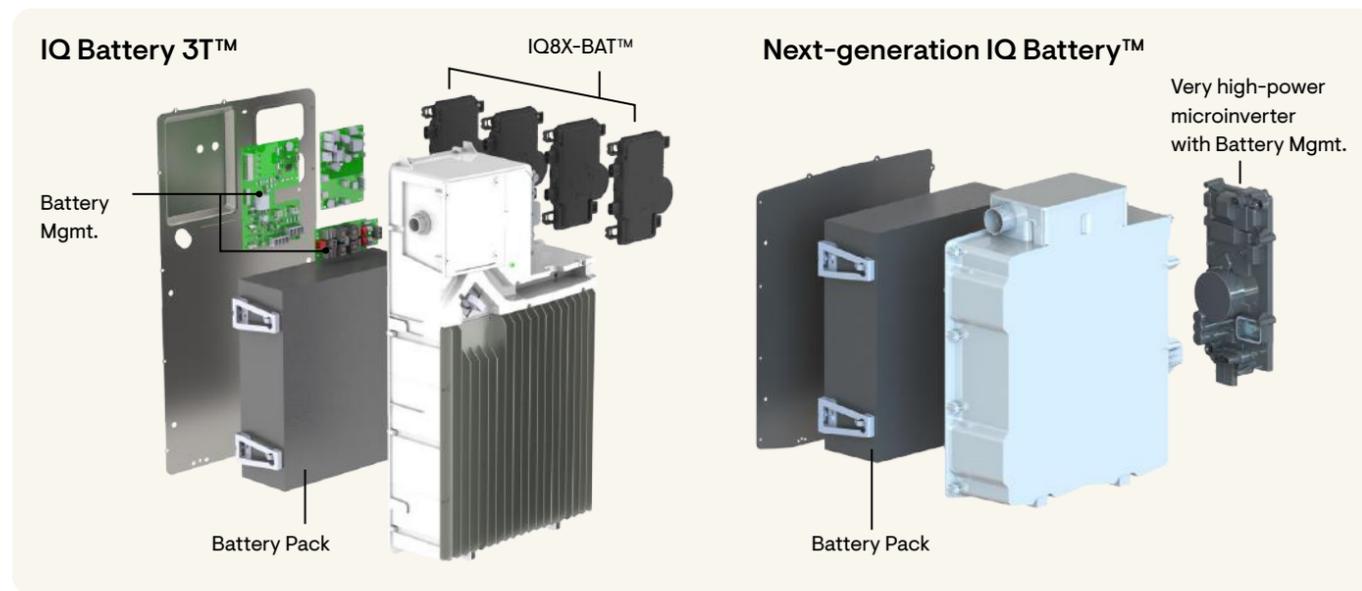
The IQ8™ microinverter, our newest invention, is a bi-directional power conversion device that has a built-in communications infrastructure and is completely software-defined. The IQ8 ASIC, what we call Swift, is approximately 1000x faster than the IQ7 ASIC, and enables Sunlight Backup™, allowing solar systems to convert the available irradiance into usable energy, even in the absence of the grid. The blazing fast switching times of Swift means that it can respond instantly to changing conditions, eliminating any battery sizing constraint. As a result, homeowners can pair IQ8 solar microinverters with a small battery and grow the system over time as their needs change, making it more affordable for homeowners to invest in solar-plus-battery systems. The IQ8 family includes five types of software-defined microinverters, IQ8, IQ8+™, IQ8M™, IQ8A™, and IQ8H™, with peak output AC power of 245VA, 300VA, 330VA, 366VA, and 384VA, respectively. The IQ8H microinverter is Enphase’s most powerful microinverter to date and has a California Energy Commission (CEC) efficiency of 97%. The multiple types of IQ8 enable seamless pairing with a full range of solar modules, even up to 540W DC. We expect to roll out the IQ8 family of microinverters for Europe and Australia in 2022.

The IQ8D is a microinverter that accepts input power from two DC panels in series and produces 640W AC output power. The power density in watts per

cubic inch of IQ8D is 50% more than IQ8 making it quite cost effective. The microinverter, along with the 3-phase cabling and gateway, is planned for U.S. small commercial solar installations ranging from 20 to 200KW, which is ideal for gas stations, schools, hospitals, churches, small businesses. etc. The value proposition of IQ8D is its high quality and rapid shut down capability. We expect to introduce derivatives of IQ8D for Australia, Brazil, and India with 740W AC output power for higher wattage modules. Beyond IQ8 and IQ8D, we are working on IQ9 and IQ10 high-power microinverters, including plans to use 600V gallium nitride (GaN) devices for AC field effect transistors (FETs) for more power, faster switching, and significantly reducing the size and costs of the main transformer. GaN devices usually come with their own custom gate drivers which reduce real estate. It is important to point out that GaN is less mature in terms of manufacturability and reliability, and we expect it to become mainstream only on IQ10 microinverters.

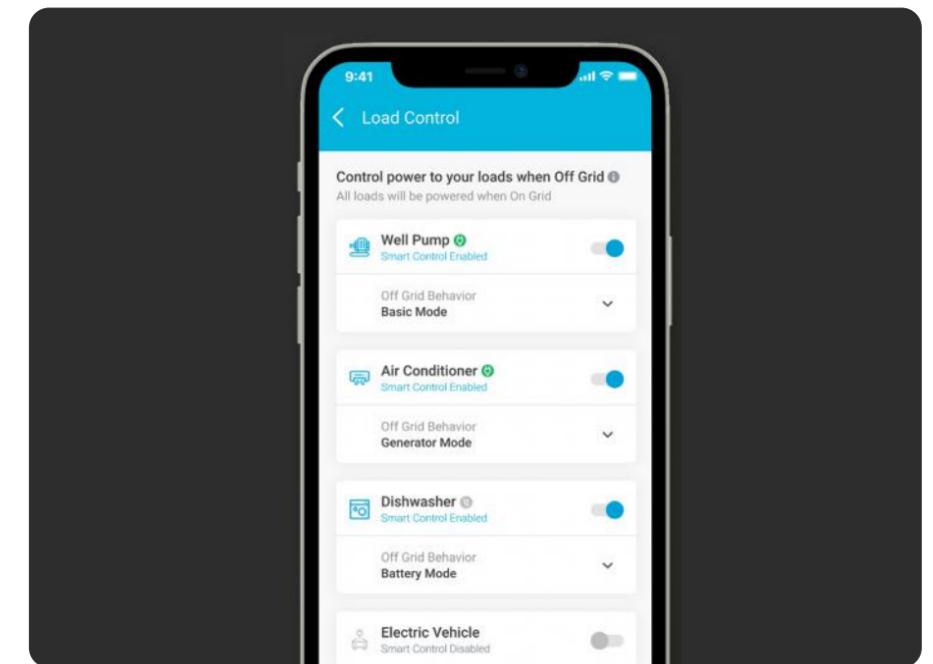
“We expect our next new product, the IQ Battery 5P, to deliver twice the continuous and peak power at lower cost, and homeowners will be able to start heavy loads such as air conditioners and pool pumps more easily.”

We are shipping IQ Batteries 3/10 (T) currently into the U.S., Germany, and Belgium. We have over 1,000 certified installers in the U.S. We receive a lot of feedback from our installers asking for higher power and robust communication. We expect our next new product, the IQ Battery 5P, to deliver twice the continuous and peak power at lower cost, and homeowners will be able to start heavy loads such as air conditioners and pool pumps more easily. This battery is planned to be introduced in the second half of 2022. We expect to begin using Controller Area Network (CAN), a more robust wired protocol going forward. For 2023, we have started working on increasing our energy density significantly, combining power conversion and battery management into a single very high-power microinverter. Our next-generation battery is expected to be available in 2023 with a significant step down in cost.



The next-generation IQ Battery™ minimizes overhead from cell pack to product

Load control is an important element of our strategy. Turning loads on or off, as well as controlling thermostats, can not only help sustain the microgrid longer during a grid outage, but also help reduce the consumption during utility peak rates. Currently, we provide a four circuit on-off control with our IQ Load Controller™, which plugs into our IQ System Controller™. This allows homeowners to turn off non-critical loads during a grid outage. The system can also be configured to reject loads based on the battery’s state of charge. We are currently designing our IQ Load Controller 2 which will sit in parallel to the main load center and enable homeowners to control 12 circuits and monitor 24 circuits via the Enphase App. The IQ Load Controller 2 can be hard wired to the Enphase System Controller onsite and is also capable of being connected to the cloud via Wi-Fi.



The IQ Load Controller available today can control four non-critical, power-hungry loads

“EV as a source is becoming a reality to support the home during outages and help the grid.”

Electric Vehicles (EVs) in the U.S. are growing at a compound annual growth rate (CAGR) of 40%, while in Europe they are growing at 25% from a larger baseline; 2.3 million EVs in 2021.² EV adoption will generally double the electricity consumption of a typical home. The charging of EVs will require more solar and storage because the grid does not have the capacity to serve the increased demand; each EV requires around 10-20kWh of stationary storage and around 4KWp of solar. However, EV as a source is becoming a reality to support the home during outages and help the grid. We acquired ClipperCreek to enter the EV charging market with a brand that stands for quality and service. The business is primarily in the U.S., split between the commercial and residential segments with all manufacturing done in Auburn, California. We plan to scale

²U.S. and EU data for all EVs calculated from S&P Global Platts

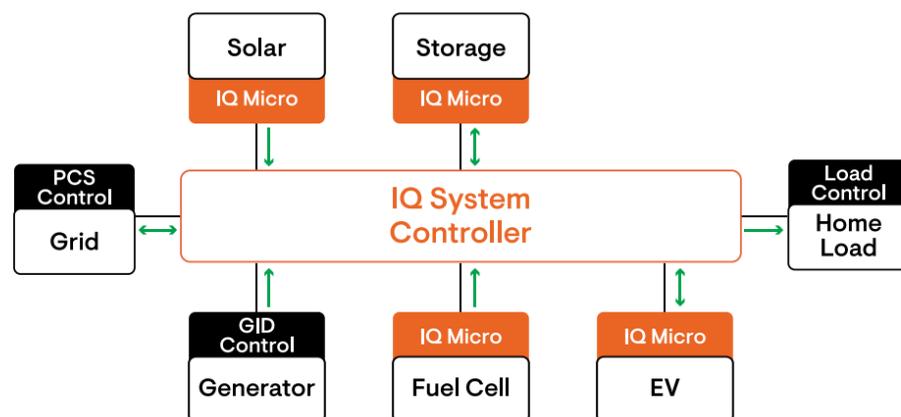
up EV charger manufacturing by transferring it to our foundry, Flex® in Mexico. We expect to build smart EV chargers with Wi-Fi connectivity with the ability to integrate into home energy systems and introduce 3-phase EV chargers into Europe. We are also working with EV makers to build bi-directional charging capability in our chargers based on the Combined Charging Standard (CCS) protocol to enable Vehicle-Home and Vehicle-Grid applications.

“The IQ System Controller brings it all together, as it performs the functions of microgrid interconnection (MID) for safety, power aggregation, connectivity, and neutral-forming.”

There is a definite use case today for both generators and fuel cells. They fill a gap when solar is weak or non-existent, especially during the winter in places such as the Northeast region in the U.S. If there are extended outages during the winter season, battery storage may not last, and a generator becomes invaluable. It will turn on, provide power to the home and recharge the battery. The frequency of turn-on may not be that often, but it is still a good option. We made our storage system compatible to accept generator inputs; this obviates the generator automatic transfer switch (ATS). The generator appears in the Enlighten™ App and offers a seamless customer experience.

While generators are useful, they are polluting, noisy, and require frequent maintenance. In that respect, fuel cells have better performance. We have invested in Upstart Power, Inc., a company which has a solid oxide fuel cell (SOFC) with almost no carbon monoxide (CO) emissions, is virtually inaudible, and generally requires no maintenance for 10 years, if used in backup mode. The idea is that the fuel cell turns on when the state of charge of the battery is low and slowly charges the battery with its 1.25KW AC power output until the state of charge is higher. There are four IQ8 microinverters in front of the fuel cell to make it AC-coupled with the grid. An attractive point about the fuel cell is that installation is quick at only about an hour. We believe a 1-2kW fuel cell is a compelling solution that may increase a home’s resilience to over 99%. However, the big challenge is to get the cost right.

We discussed grid services in the prior section; we believe home batteries can play a key role in helping the grid. The utilities can start to leverage other DERs as well in the long run. Our differentiation is that we make it easier for



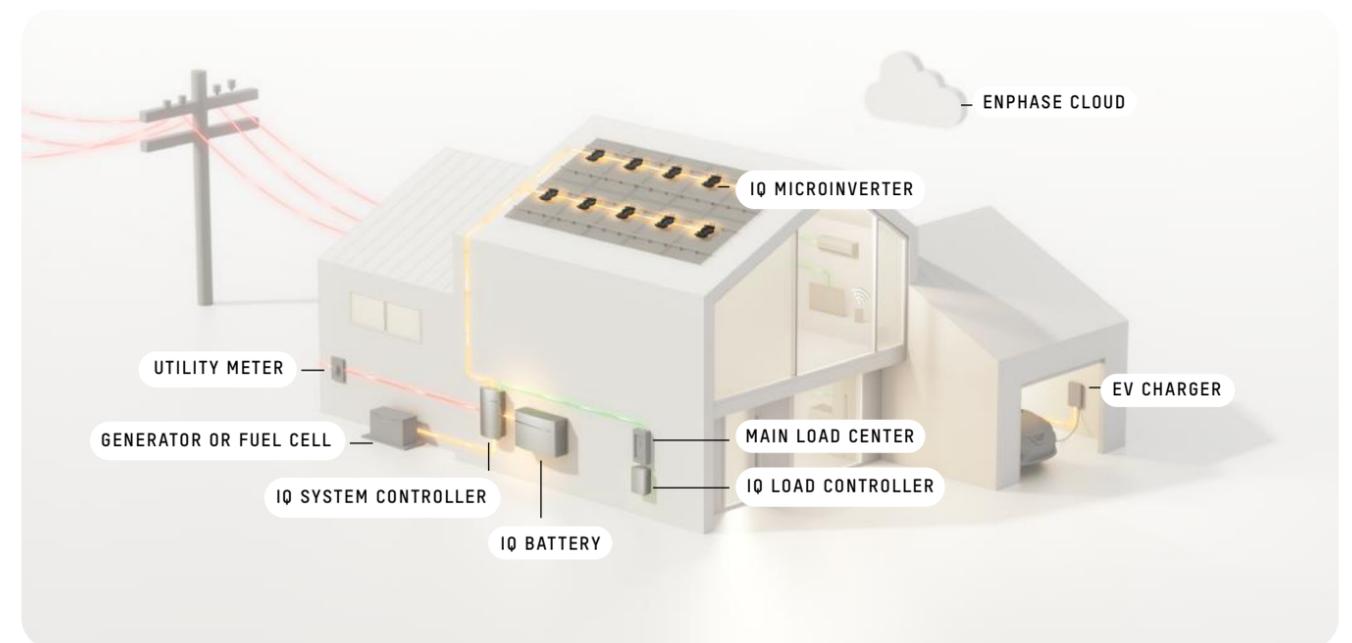
The IQ System Controller™ does micro-grid interconnection, power aggregation, connectivity, and neutral-forming

“There is a lot more to be done, but it is exciting to see that our transformation from a solar company to an energy technology company is starting to happen.”

the homeowner to enroll in grid services programs offered by the utility and to view how much they made and how their batteries performed in every discharge event. Consumers can even choose the previous day to participate in a grid services event or not.

We have discussed our strategy for all the AC-coupled elements of an Enphase home energy system: microinverters, batteries, load control, EV charging, generator or fuel cell compatibility, and grid services. The IQ System Controller brings it all together, as it performs the functions of microgrid interconnection (MID) for safety, power aggregation, connectivity, and neutral-forming. It interfaces with solar, storage, grid, EV, and home loads, and does local control, as well as receives instructions from the cloud and dispatches them to the distributed energy resources onsite. The IQ System Controller uploads data to the Enphase cloud hosted on Amazon Web Services (AWS) at a regular frequency and all the data is available at the homeowner’s fingertips through the Enphase App™. Often, the homeowner only looks at the Enphase App to see if everything is working. The app provides incredible insight into the system and offers unprecedented control to the consumer such as the ability to disconnect from the grid simply with the touch of a button. This feature is a favorite of ours to demonstrate the power of the app to customers.

With our introduction of new products and services in the past year, along with our acquisitions, we are now able to offer full home energy systems to our partners – solar, batteries, load control, EV chargers, compatibility with third-party generators, and grid services. There is a lot more to be done, but it is exciting to see that our transformation from a solar company to an energy technology company is starting to happen.



The AC-coupled Enphase Energy System is shown with all the distributed energy resources

Our 2022 priorities



The IQ Battery 5P has double the power of our current batteries, enabling heavier loads to start easier

“If we put the customer first in everything we do, we will come out ahead – it is that simple.”

Our strong performance in 2021 has positioned us well with a solid foundation. As we move into 2022, our focus is on the following priorities to take advantage of key growth opportunities.

Provide the best customer experience

If we put the customer first in everything we do, we will come out ahead – it is that simple. We will measure feedback from customers, listen to them, act swiftly, and solve their pain points. We plan to simplify commissioning and target reduction to 60 minutes. We will maintain world-class quality levels and aim for one-minute wait times. We expect new products to have a learning curve and we will be in the front and center to help customers. We will anticipate customer problems using the power of data and analytics from our Network Operations Center. We will continue to measure what matters, using metrics like NPS, call wait times, and defective parts per million (DPPM).

Develop best-in-class home energy systems

We have some critical products to launch in 2022. We think the IQ Battery 5P with 2X the power will be a game-changer globally. The IQ8D microinverter will launch us into the small commercial solar market in the U.S. and residential solar markets in Australia, Brazil and India. The Portable Energy System is our first foray into the consumer segment and will provide energy security indoors as well as energy-on-the-go outdoors. We plan to add networking to ClipperCreek EV chargers and integrate them with our home energy systems. We also expect to finalize our architecture on IQ9 microinverters and the next-gen IQ batteries.



The Portable Energy System offers energy security indoors plus energy-on-the-go for outdoors

Build on the acquisitions and create a complete installer digital platform

We plan to stay focused on providing installers with a full digital platform. There are six big steps in the platform – **lead management**, which provides leads directly into the Installer platform with the SolarLeadFactory acquisition; **design and proposal** through Solargraf Pro™ with shading analysis, ability to detect obstructions on the roof, and 3-D modeling of homes; **financing and contracting** through Solargraf Pro which brings loan partners to installers to close sales; **permit plan sets** through Solargraf Pro which helps installers with faster turnaround; **installation and commissioning** which allows for the seamless installation of products through the Enphase® Installer App; and **operations and maintenance (O&M)** which helps installers with their O&M services by providing them with the 365 Pronto tech platform. Our end objective is to simplify installer lives so that they never need to look elsewhere to manage their business.

“We plan to stay focused on providing installers with a full digital platform.”

1 Lead Management Provide leads into the Installer Platform with the SolarLeadFactory acquisition

2 Design and Proposal Solargraf Pro™ makes state-of-the-art design and proposal software

3 Financing and Contract Solargraf Pro brings Fintech partners to our installers to close sales

4 Permit Plan Sets Solargraf Pro helps installers with fast turnaround on their permits

5 Installation and Commissioning Enphase Installer App allows for seamless installation of products

6 Operations and Maintenance Helps installers with their O&M services by providing them with the 365 Pronto tech platform



HCS-40 is ClipperCreek's most popular high-power EV charger

Final thoughts

With all the important energy technology advances we have made since Enphase was founded 15 years ago, we are just getting started. Our pioneering work in microinverter technology has made solar energy safer, more reliable, and more practical than ever. In this next chapter, we are developing complete energy systems designed to electrify homes and businesses, globally.

Full home electrification is slowly but surely coming. Countries like Germany are leading the way in adopting solar and batteries to support EVs, heat pumps, and other home loads. We have no doubt that other countries will follow suit. The good news is that Enphase is prepared to help as this is what we do best - make great products.

Our three cornerstones of innovation, quality, and customer experience are serving us well. Our business principles of being lean and capital light have enabled us to make substantial profits. We hope to build our per share intrinsic value by improving our earnings power organically, making acquisitions aligned with our strategy, and repurchasing our shares when there is a meaningful discount from intrinsic value.

Today, if you see a home in the U.S. with solar panels on it, there is a good chance it is an Enphase home. By the end of 2021, we had installed more than 42 million microinverters on approximately 1.9 million homes in over 130 countries, helping millions of people gain access to cleaner, affordable, and more reliable energy while creating jobs and contributing towards a carbon-free future. We are putting power in the hands of people, enabling them to make, use, save, and even sell their own power, and control it with an app they hold in their hand. We're making it possible for people to become producers and participants in a clean energy future—when people and the planet need it most.

I would like to thank our employees for their dedication and hard work towards advancing a sustainable future for all, and our customers, partners, and shareholders for their continued support.

To be continued,



Badri Kothandaraman
President and CEO

April 12, 2022



The 5 types of software-defined IQ8 grid-forming microinverters
delivering up to 384 VA peak AC power

Appendix

Enphase Energy, Inc. reconciliation of Non-GAAP financial measures

In thousands, except per share data and percentages

	Year Ended	
	December 31, 2021	December 31, 2020
Gross profit (GAAP)	\$ 554,422	\$ 345,981
Stock-based compensation	7,366	3,759
Tariff refunds	-	(38,940)
Acquisition related amortization	184	-
Gross profit (Non-GAAP)	\$ 561,972	\$ 310,800
Gross margin (GAAP)	40.1 %	44.7 %
Stock-based compensation	0.6 %	0.5 %
Tariff refunds	- %	(5.1)%
Acquisition related amortization	- %	- %
Gross margin (Non-GAAP)	40.7 %	40.1 %
Operating expenses (GAAP)	\$ 338,590	\$ 159,542
Stock-based compensation	(106,920)	(38,744)
Acquisition related expenses and amortization	(10,752)	(2,502)
Operating expenses (Non-GAAP)	\$ 220,918	\$ 118,296
Operating expenses (Non-GAAP) % of revenue	16.0 %	15.3 %
Income from operations (GAAP)	\$ 215,832	\$ 186,439
Stock-based compensation	114,286	42,503
Tariff refunds	-	(38,940)
Acquisition related expenses and amortization	10,936	2,502
Income from operations (Non-GAAP)	\$ 341,054	\$ 192,504
Net income (GAAP)	\$ 145,449	\$ 133,995
Stock-based compensation	114,286	42,503
Tariff refunds	-	(39,567)
Acquisition related expenses and amortization	10,936	2,502
Non-cash interest expense	44,387	18,825
Loss on partial settlement of convertible notes	56,497	3,037
Change in fair value of derivatives	-	44,348
Non-GAAP income tax adjustment	(31,241)	(17,117)
Net income (Non-GAAP)	\$ 340,314	\$ 188,526
Net income per share, basic (GAAP)	\$ 1.09	\$ 1.07
Stock-based compensation	0.85	0.34
Tariff refunds	-	(0.32)

Enphase Energy, Inc. reconciliation of Non-GAAP financial measures (continued)

In thousands, except per share data and percentages

	December 31, 2021	December 31, 2020
Acquisition related expenses and amortization	0.08	0.02
Non-cash interest expense	0.33	0.15
Loss on partial settlement of convertible notes	0.42	0.03
Change in fair value of derivatives	-	0.35
Non-GAAP income tax adjustment	(0.23)	(0.14)
Net income per share, basic (Non-GAAP)	\$ 2.54	\$ 1.50
Shares used in per share calculation GAAP and Non-GAAP	134,025	125,561
Net income per share, diluted (GAAP)	\$ 1.02	\$ 0.95
Stock-based compensation	0.81	0.31
Tariff refunds	-	(0.28)
Acquisition related expenses and amortization	0.08	0.02
Non-cash interest expense	0.32	0.14
Loss on partial settlement of convertible notes	0.40	0.02
Change in fair value of derivatives	-	0.33
Non-GAAP income tax adjustment	(0.22)	(0.12)
Net income (loss) per share, diluted (Non-GAAP) (1)	\$ 2.41	\$ 1.37
Shares used in per share calculation GAAP	142,878	141,918
Shares used in per share calculation Non-GAAP (2)	141,181	137,469
Net cash provided by operating activities (GAAP)	352,028	216,334
Purchases of property and equipment	(52,258)	(20,558)
Deemed repayment of convertible notes due 2024 and notes due 2025 attributable to accreted debt discount	15,718	3,132
Free cash flow (Non-GAAP)	\$ 315,488	\$ 198,908

¹ Calculation of non-GAAP diluted net income per share for the year ended December 31, 2021 and 2020, excludes convertible notes due 2023 interest expense, net of tax of less than \$0.1 million in each period from non-GAAP net income.

² Effect of dilutive in-the-money portion of convertible senior notes and warrants are included in the GAAP weighted-average diluted shares in periods where the Company has GAAP net income. The Company excluded the in-the-money portion of convertible notes due 2024 totaling 768 thousand and 4,449 thousand shares for the year ended December 31, 2021, and 2020, respectively, from non-GAAP weighted-average diluted shares as the Company entered into convertible note hedge transactions that reduce potential dilution to the Company's common stock upon any conversion of the notes due 2024. The Company excluded the in-the-money portion of convertible notes due 2025 totaling 929 thousand shares for the year ended December 31, 2021, from non-GAAP weighted-average diluted shares as the Company entered into convertible note hedge transactions that reduce potential dilution to the Company's common stock upon any conversion of the notes due 2025.



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Stock exchange listing
Enphase Energy, Inc. common stock trades on the NASDAQ Global Market under the symbol ENPH
Financial and investor information is available on the company's investor relations website at investor.enphase.com