



## Enphase Energy Collaborates with University of Washington for 100% Renewables Grid

### Enphase providing Grid-Forming (GFM) inverters and engineering expertise in support of a project to enable unrestricted amounts of distributed solar-plus-storage power on the grid

FREMONT, Calif., May 26, 2020 (GLOBE NEWSWIRE) -- [Enphase Energy, Inc.](#) (NASDAQ:ENPH), a global energy technology company and the world's leading supplier of solar microinverters, today announced that the Company is using its expertise in grid-forming inverters, based on Enphase Ensemble™ technology, to support the initiative at the University of Washington to develop control systems for unrestricted penetration of photovoltaic (PV) solar on the grid. Combined with approximately \$1 million in grant funding from the Department of Energy's (DOE) Office of Energy Efficiency and Renewable Energy (EERE), Enphase will provide test platforms and invest approximately \$420,000 over the project's three-year timeline.

Under the heading, *A Scalable Control Architecture for 100% PV Penetration with Grid Forming Inverters*, Enphase joins a team of industry partners and experts from the University of Washington to help solve one of the most important challenges to the proliferation of grid-attached distributed energy generation. Enphase will focus on running specialized test scenarios and gathering data at the Company's single- and three-phase, on- and off-grid rooftop solar R&D facility in Austin, Texas. The test array is equipped with Enphase microinverters featuring the Company's custom ASIC, which powers the software-defined architecture that allows Enphase to reprogram a test fleet of microinverters with control architectures and algorithms developed by the University of Washington. The control architectures and algorithms will be tested to validate robust controller performance under real-world weather variability.

"This project will uncover the architectural and algorithmic foundations required to reliably integrate unlimited distributed, renewable energy resources, like solar photovoltaic (PV), on our electric grids," said Brian B. Johnson, Washington Research Foundation Innovation Assistant Professor of Clean Energy and Electrical & Computer Engineering at the University of Washington. "More than 100 municipalities in the U.S. have established directives or portfolios that target 100% renewable integration. We engaged Enphase because we believe its software-defined, grid-forming microinverters are the ideal platform on which to develop and test our controllers. Aggressive grid-connected renewables targets are no longer aspirational, and our work will ensure that the transition to a more cost-effective, secure, and resilient grid happens in a reliable manner."

"Enphase decided to support the University of Washington and the Department of Energy in this important effort because resilient solar-plus-storage not only benefits the residential and commercial segments, but plays a strategic role in providing energy security to assets in the nation's critical infrastructure sectors," said Hans van Antwerpen, chief technology officer at Enphase Energy. "Our always-on Ensemble technology is ideally suited to support the development of a scalable architecture for control and coordination of networks with up to 100% inverter-interfaced solar and battery storage resources. We are proud to contribute to the development of this important evolution of the energy grid."

Enphase Ensemble energy management technology is capable of powering traditional grid-tied, grid-agnostic microgrid, and fully off-grid energy products. Researchers at the University of Washington will leverage Ensemble technology using a combination of eighth-generation Enphase IQ™ microinverters, the Enphase Encharge™ storage system, the Enphase IQ Combiner™ device and the Enphase Enpower™ smart switch with fine-grained load control, and the powerful cloud-based Enphase Enlighten™ monitoring, communications, and control system. The Enphase Encharge storage system features embedded grid-forming Enphase microinverters that enable always-on functionality and will be compatible with both new and existing Enphase IQ solar systems with IQ 6™ or IQ 7™ microinverters, providing a simple upgrade path for existing Enphase solar customers.

#### About Enphase Energy, Inc.

Enphase Energy, a global energy technology company, delivers smart, easy-to-use solutions that manage solar generation, storage and communication on one intelligent platform. The Company revolutionized the solar industry with its microinverter technology and produces a fully integrated solar-plus-storage solution. Enphase has shipped more than 27 million microinverters, and over 1.1 million Enphase systems have been deployed in more than 130 countries. For more information, visit [www.enphase.com](http://www.enphase.com) and follow the Company on [Facebook](#), [LinkedIn](#) and [Twitter](#).

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#### Forward-Looking Statements

This press release may contain forward-looking statements, including statements related to the expected capabilities and performance of Enphase Energy's technology and products including grid-agnostic and off-grid and software enabled abilities; our product reliability; ease and flexibility of developing scalable architecture using our products; and the capabilities of our partners. These forward-looking statements are based on Enphase's current expectations and inherently involve significant risks and uncertainties. Actual results and the timing of events could differ materially from those anticipated in such forward-looking statements as a result of certain risks and uncertainties including those risks described in more detail in Enphase's most recent Annual Report on Form 10-K and other documents on file with the SEC and available on the SEC's website at [www.sec.gov](http://www.sec.gov). Enphase Energy undertakes no duty or obligation to update any forward-looking statements contained in this release as a result of new information, future events or changes in its expectations, except as required by law.

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