

Students Benefit from the Best Thing Under the Sun

CHALLENGE

Transform 130 diverse rooftops into sources of clean, affordable, and reliable energy

SOLUTION

Utilize microinverter technology as a building block for arrays ranging in size from 30kW to 250kW

RESULT

Enable 3.1MW of solar to benefit school district with flexible approach

Solar energy education implemented into K-12 science curriculum



“Microinverters addressed the complexity and scale of this project beautifully. Enphase enabled the best possible outcome.”

—Eric Hinckley
Senior Vice President and CTO
Main Street Power

With nearly 200 schools, 16,000 employees, and 135,000 students, the San Diego Unified School District (SDUSD) needed a flexible, scalable technology to go solar. Now, thanks to Main Street Power and Enphase Energy, 29 of those schools have incorporated solar energy and a new solar curriculum.

Microinverters Deliver Flexible Arrays

Although safety is a primary concern in all school installations, the Enphase System was chosen for more than just its extremely safe, low-voltage, all-AC approach. Enphase’s energy harvest boost of 5-7% over traditional inverters was an added bonus that made Enphase technology the perfect choice for the job.

Additionally, with Enphase microinverters, Main Street Power and the SDUSD can rely on one technology to support 3.1MW of arrays. More than 125 different arrays were installed using different angles, orientations, and sizes. Where small rooftop



The students of San Diego learn where their energy comes from in addition to understanding how solar technology works through their new science curriculum.

spaces would have made installing solar logistically impossible with string inverters, flexible microinverters can be customized to fit both the smallest of arrays as well as megawatt-scale systems. The design diversity of SDUSD's distributed 3.1MW solar system exemplifies the flexibility and adaptive nature of Enphase microinverters.

Strategic Financing Leads to Smart Savings

Interested in reducing its energy costs as well as its carbon footprint, the San Diego Unified School District utilized a power purchase agreement (PPA) to go solar with no upfront costs or long-term maintenance burden because of Main Street Power's unique financing package. Leveraging both new market tax credits and the solar investment tax credit, Main Street Power initiated solar development in low-income areas, exposing students at 25 different schools and their parents to both the financial and environmental benefits of solar energy.

Main Street Power was the first solar company to pioneer this new financial approach – saving the schools money that can be put back into operations, supplies, and teaching resources.

Education Through Solar

Additionally, Main Street Power has developed an innovative K-12 solar education program to be integrated into the schools' science curriculum. In its "Train the Trainers" program, Main Street Power

INSTALLATION SUMMARY

Client **San Diego Unified School District**

Location **San Diego, CA**

Installer **Main Street Power**

System Size **3.1MW**

Microinverters **Enphase M215**

Modules **Astronergy 230W**

will teach 29 SDUSD science teachers a new curriculum about renewables, solar energy, and more specifically, what's happening on the rooftops of the schools.

To help engage students and visitors in the schools, the lobby of each school also hosts a kiosk displaying the system's progress and production history.

About Enphase Energy

The Enphase System revolutionizes solar power generation with industry-leading technology innovation. Enphase's proven microinverter technology maximizes production of each module, which works together with advanced communications hardware and an intelligent software platform to deliver a reliable, high-performance solar array.

To learn more about the benefits of the Enphase System, visit enphase.com/commercial.