

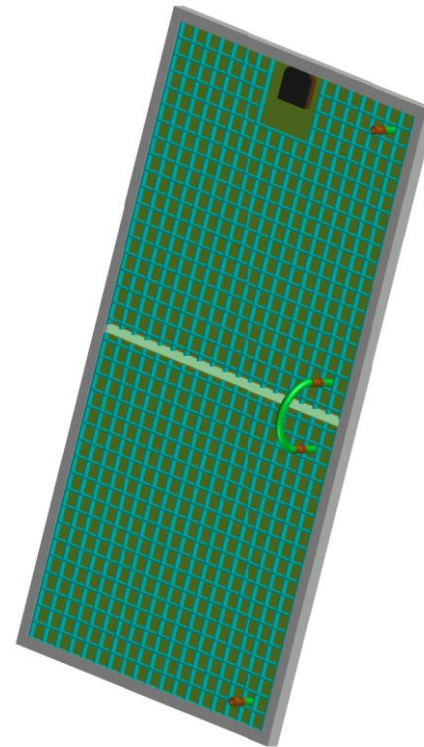
# SunStack Energy: We boost PV output 10%

## Problem: PV modules heat up reducing power output

- Sunlight heats up PV modules causing a voltage drop that reduces the power produced
- PV modules typically operate at 45C or higher; 25C over room temperature
- Cooling a module by 25 C boosts PV output by ~10%
- Heat energy captured by cooling fluid is double the electrical power

## Solution: SunStack device cools PV modules by 25 C, increasing PV output

Sketch of SunStack Device



- We maximize heat transfer— with a high surface area & a high flowrate
- Lightweight and low-cost heat exchanger design
- Device “clips on” to back of PV module frame
- heat exchanger has two support structures per PV module—ensures easy handling & fast installation