Rolarus

Concentrated Solar for Heat & Power

Problem

- Oil & natural gas prices spike in 2022
- Record number of homes behind on their utility payments
- Energy prices are out of control
- People may lose their homes and businesses

Solution

- Leverage concentrated solar attributes
- Efficiently collect high temperature fluids plus enable the use of high efficiency CPV
- Solar utilization over 60%
- System can be used in parallel with existing heating systems
- For use in homes, hotels, restaurants, and other small businesses
- Typical return on investment of 3 years or less for an average home

AMERICAN MADE SOLAR PRIZE
U.S. DEPARTMENT OF ENERGY

The Goal

Freedom from Tyrannical Energy Prices

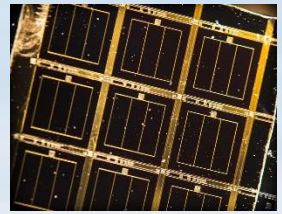
The Path Forward

- Work with NREL and industry experts to define the most efficient and cost effective concentrators
- Optimize CPV cells, interconnections, and layouts
- Examine best practices for thermal storage
- Work with vendors to develop the best solutions for the various subsystems
- Maximize “Made in America” content

More Solar Than You Ever Dreamed Possible

In thermal mode, sunlight is focused onto the thermal receiver

In electrical mode, Concentrating Photovoltaic (CPV) is rotated in front of the receiver (up to 44% efficient)



CPV cells